

Course Descriptions

College Credit Course Descriptions

Statement on Florida's Statewide Course Numbering System

The course numbers appearing in the catalog are part of a statewide system of prefixes and numbers developed for use by all public postsecondary and participating private institutions in Florida. One of the major purposes of this system is to make transferring easier by identifying courses which are equivalent, no matter where they are taught in the state. All courses designated as equivalent will carry the same prefix and last three numeric digits.

The classifying and numbering of courses was done by postsecondary faculty members in each academic discipline. Their work was reviewed by faculty members in all of Florida's postsecondary institutions, who made suggestions and changes to be incorporated into the system.

The course numbering system is, by law, descriptive, not prescriptive. It in no way limits or controls what courses may be offered or how they are taught. It does not affect course titles or descriptions at individual schools. It seeks only to describe what is being offered in postsecondary education in Florida in a manner that is intelligible and useful to students, faculty and other interested users of the system.

The course numbering system was developed so that equivalent courses could be accepted for transfer without misunderstanding. Each public institution is to accept for transfer credit any course which carries the same prefix and last three numeric digits as a course at the receiving institution.

For example, if a student has successfully completed SYG 000 at a community college, the student cannot be required to repeat SYG 000 at the school to which he or she transfers. Further, credit for any course or its equivalent, as judged by the appropriate faculty task force and published in the course numbering system, which can be used by a native student to satisfy degree requirements at a state university, can also be used for that purpose by a transfer student regardless of where the credit was earned.

It should be noted that a receiving institution is not precluded from using non-equivalent courses for satisfying certain requirements.

General Rule for Course Equivalencies

All undergraduate courses bearing the same alpha prefix and last three numbers (and alpha suffix, if present) have been agreed upon to be equivalent. For example, an introductory course in sociology is offered in nearly 40 postsecondary institutions in Florida. Since these courses are considered to be equivalent, each one will carry the designator SYG 000.

First Digit

The first digit of the course number is assigned by the institution, generally to indicate the year or (level at which) it is offered. This digit does not affect the equivalency.

- 0 — college preparatory credit
(not for degree)
- 1 — freshman year
- 2 — sophomore year

In the sociology example mentioned above, one institution which offers the course in the freshman year will number it SYG 1000; a school offering the same course in the sophomore year will number it SYG 2000. If the prefix and last three numeric digits are the same, the courses are substantively equivalent.

Titles

Each institution will retain its own title for each of its courses. The sociology courses mentioned above are titled at different colleges Introductory Sociology, General Sociology and Principles of Sociology. The title does not affect the equivalency. The courses all carry the same prefix and last three numeric digits: that is what identifies them as equivalent.

Equivalency of Sequences

In certain cases, sequences of courses in a given discipline are equivalent rather than the individual courses which make up these sequences. In these cases the subject matter topics may not be taught in the same sequence, course by course, in several institutions; however, upon completion of the full sequence at any of the several institutions, students have completed substantively equivalent content. These sequences are clearly identified in the course equivalency profiles.

Explanation of Prefixes and Numbers

Prefixes and numbers in the course numbering system are not chosen at random; they are designed to describe course content in an organized fashion within a classification system developed for each subject matter area.

Generally each of the major classifications in a discipline is represented by a three-alpha prefix. In some cases, one three-alpha prefix has been sufficient for the entire discipline. A discipline may use as many prefixes as necessary to accommodate its major classifications. The logic of the system allows it to be infinitely expandable with minimal disruption to existing numbers.

History, for example, has several prefixes: AFH, African History; AMH, American History; ASH, Asian History; EUH, European History; HIS, History — General; LAH, Latin American History; and WOH, World History. All history courses in the state will carry one of these prefixes. (Local titles are used for each particular course. The last three numbers are used to indicate equivalency.)

Exceptions to the Rule for Equivalencies

The following are exceptions to the general rule for course equivalencies.

1. All numbers which have a second digit of nine are for courses as directed independent study, thesis hours, etc., and courses with 900 numbers must be evaluated individually and are not automatically transferable.
2. All internships, practicums, clinical experiences and study abroad courses, whatever numbers they carry, are not automatically transferable.
3. Performance or studio courses in art, dance, theater and music are not automatically transferable but must be evaluated individually.

Statewide Course Numbering System

Course Prefix Titles Index

Listed below is an alphabetical index of the course classification discipline and the respective course three-digit prefix. To identify the course prefix, scan the alphabetical listing, locate the desired classification discipline and then note the prefix that distinguishes that specific discipline.

The courses which Florida Community College at Jacksonville offers in that discipline can be ascertained by following the appropriate three-digit prefix in the alphabetical listing of course descriptions in the following section of the catalog.

Classification Discipline

Accounting: General
 Advertising
 Aeronautical Science
 American History
 American Literature
 Anthropology
 Applied Accounting
 Arabic Language
 Architecture
 Art
 Art History
 Asian History
 Astronomy
 Automotive/Engine Repair
 Aviation Management
 Aviation Technology Flight
 Aviation Technology Theory
 Banking
 Biological Science — Introductory
 Botany
 Building Construction
 Building Construction Trades
 Business Law
 Chemistry
 Child Development
 Chinese
 Clothing and Textiles
 Comparative Politics
 Computer and Information Systems
 Computer Design/Architecture

Prefix

ACG
 ADV
 ASC
 AMH
 AML
 ANT
 APA
 ARA
 TAR
 ART
 ARH
 ASH
 AST
 AER
 AVM
 ATF
 ATT
 BAN
 BSC
 BOT
 BCN
 BCT
 BUL
 CHM
 CHD
 CHI
 CTE
 CPO
 CIS
 CDA

Computer Engineering Technology
 Computers in General Studies
 Computer Programming
 Computing Theory
 Creative Writing
 Criminal Justice Development
 Criminal Justice Technology
 Criminology and Criminal Justice
 Dance Activities
 Dental Hygiene
 Dental Support
 Developmental Psychology
 Dietetic
 Economics
 Education: Early Childhood
 Education: Foundations
 Education: General
 Education: Hard of Hearing and Deaf
 Education: Technology and Media
 Educational Psychology
 Electronic Engineering Technology
 Electronic Specialty Technology
 Emergency Medical Services
 Engineering Technology: Civil
 Engineering Technology: Drafting
 Engineering Technology: General
 Engineering Technology: Industrial
 Engineering Technology: Mechanical
 English as a Second Language
 (for Non-Native Speakers)
 English as a Second Language — Preparatory
 English Composition
 English Literature
 European History
 Film
 Finance
 Fire Fighting and Protection
 Food Science
 Food Service Systems
 French Language
 General Business
 General History
 Geography: Regional Areas
 Geography: Systematic
 Geology
 German and Germanic Languages
 Graphic Arts
 Health, Leisure and Physical Education
 Health Science
 Home Economics: Family Development
 Hotel and Restaurant
 Humanities
 Human Nutrition
 Human Services
 Interdisciplinary Science — Natural
 Interdisciplinary Social Sciences
 Interdisciplinary Studies
 Interior Design
 International Relations
 Italian Language
 Japanese Language
 Journalism

CET
 CGS
 COP
 COT
 CRW
 CJD
 CJT
 CCJ
 DAA
 DEH
 DES
 DEP
 DIE
 ECO
 EEC
 EDF
 EDG
 EHD
 EME
 EDP
 EET
 EST
 EMS
 ETC
 ETD
 ETG
 ETI
 ETM
 ENS
 ESL
 ENC
 ENL
 EUH
 FIL
 FIN
 FFP
 FOS
 FSS
 FRE
 GEB
 HIS
 GEA
 GEO
 GLY
 GER
 GRA
 HLP
 HSC
 FAD
 HFT
 HUM
 HUN
 HUS
 ISC
 ISS
 IDS
 IND
 INR
 ITA
 JPN
 JOU

Latin American History	LAH	Political Science	POS
Leisure	LEI	Process Biology	
Library Sciences	LIS	(Cell/Molecular/Ecology/Genetics/Physiology)	PCB
Linguistics	LIN	Psychology	PSY
Literature	LIT	Quantitative Methods in Business	QMB
Management	MAN	Radiologic Technology	RTE
Management: Applied	MNA	Radio/Television	RTV
Marketing	MAR	Reading	REA
Marketing Applications	MKA	Real Estate	REE
Mass Media Communications	MMC	Religion	REL
Mathematics: Algebraic Structures	MAS	Respiratory Therapy	RET
Mathematics: Applied	MAP	Risk Management and Insurance	RMI
Mathematics: Calculus and Precalculus	MAC	Russian Language	RUS
Mathematics: Education	MAE	Social Psychology	SOP
Mathematics: General	MAT	Sociology, General	SYG
Mathematics: General and Finite	MGF	Spanish Language	SPN
Mathematics: History and Foundations	MHF	Speech Communication	SPC
Medical Laboratory Technology	MLT	Speech Pathology and Audiology	SPA
Medical Records	MRE	Statistics	STA
Meteorology	MET	Student Life Skills	SLS
Microbiology	MCB	Surveying and Related Areas	SUR
Military Science	MIS	Tax	TAX
Modern Hebrew Language	HBR	Theatre	THE
Music	MUS	Theatre Arts	TPP
Music: Brasses	MVB	Theatre Production and Administration	TPA
Music: Church	MUR	Transportation	TRA
Music: Commercial	MUM	Women's Studies	WST
Music: Composition	MUC	Zoology	ZOO
Music: Conduction	MUG		
Music: Education	MUE		
Music: History	MUH		
Music: Keyboard	MVK		
Music: Literature	MUL		
Music: Music Ensembles	MUN		
Music: Opera/Musical Theatre	MUO		
Music: Other Instruments	MVO		
Music: Percussion	MVP		
Music: Strings	MVS		
Music: Theory	MUT		
Music: Voice	MVV		
Music: Woodwinds	MVW		
Nursing Practice and Theory	NUR		
Oceanography: Biological	OCB		
Oceanography: General	OCE		
Office Systems Technology	OST		
Oral Interpretation	ORI		
Ornamental Horticulture	ORH		
Para-Legal Assistant	PLA		
Philosophy	PHI		
Photography	PGY		
Physical Education Acts (General) — Object Centered, Land	PEL		
Physical Education Acts (General) — Performance Centered, Land	PEM		
Physical Education Acts (General) — Water, Snow, Ice	PEN		
Physical Education Acts (Professional) — Object Centered, Land	PEO		
Physical Education Theory	PET		
Physical Science	PSC		
Physics	PHY		
Physics	PHZ		

COURSE DESCRIPTIONS

COLLEGE CREDIT COURSES IN THIS CATALOG WITH THE (Y) SYMBOL COUNT TOWARD THE ASSOCIATE IN ARTS DEGREE AND ARE GUARANTEED TRANSFERABLE FOR THOSE STUDENTS TRANSFERRING WITH THE ASSOCIATE IN ARTS DEGREE. WHEN STUDENTS TRANSFER WITHOUT THE ASSOCIATE IN ARTS DEGREE, THE TRANSFERABILITY OF THESE COURSES IS DECIDED BY THE RECEIVING INSTITUTION.

COLLEGE CREDIT COURSES IN THIS CATALOG WITHOUT THE (Y) SYMBOL WILL NOT COUNT TOWARD THE ASSOCIATE IN ARTS DEGREE. THE TRANSFERABILITY OF THESE COURSES IS DECIDED BY THE RECEIVING TRANSFER INSTITUTION.

Several opportunities to earn credit by examination are provided to students with prior learning and life experiences in content areas. Credit by examination programs include the College Level Examination Program (CLEP), the DANTES Subject Standardized Tests, the ACT Proficiency Examination Program (ACT/PEP) and the College's own Proficiency Examination Program (PEP). Courses for which an examination is available through one of these programs are identified with a (CBE) at the end of the course description. Occasionally the testing program sponsor will discontinue a test, so contact any campus testing and assessment center for additional information concerning test availability and registration information.

All courses in the following list are not taught each term. Class schedules are published prior to each term that show the courses that will be offered. Many courses in this catalog have prerequisite courses listed in the course descriptions.

In the college credit course descriptions listed below the contact hours listed refer to the number of contact hours per week during a 15-week semester. When a course is taught during a term which is shorter or longer than 15 weeks, the number of contact hours per week is adjusted proportionately.

ACG — Accounting: General

ACG 2021 Financial Accounting (Y) 4 cr.

This course is the study of the area of accounting that specializes in the processes and principles used to prepare financial statements. Four contact hours.

ACG 2071 Managerial Accounting (Y) 3 cr.

Prerequisite: ACG 2021. This course interprets and analyzes three major areas: planning and controlling routine operations (break-even analysis, job order and process cost systems); inventory valuation and income determination (budgeting and standard costing); and policy making and long-range planning (capital budgeting). Three contact hours.

ACG 2100 Intermediate Accounting I (Y) 3 cr.

Prerequisite: ACG 2021. This course is a continuation of accounting principles including a review of the accounting cycle with special attention given to working capital, an in-depth study of financial statements, cash, receivables, current liabilities, inventories, plant and equipment assets and intangible assets. Three contact hours.

ACG 2110 Intermediate Accounting II (Y) 3 cr.

Prerequisite: ACG 2100. This course is a continuation of Intermediate Accounting I with coverage of the following topics: a study of corporate contributed capital, retained earnings and dividends, earnings per share, long-term debt and investments, pension plans and leases, accounting for income taxes, the statement of changes in financial position, accounting for price level changes and further statement analysis. Three contact hours.

ACG 2500 Fund Accounting (Y) 3 cr.

Prerequisite: ACG 2071. This course, recommended for associate in science in accounting students, is a study of the accounting methods and procedures used by not-for-profit organizations such as governmental agencies, hospitals and charitable organizations. Three contact hours.

ADV — Advertising

ADV 2000 Advertising (Y) 3 cr.

This basic course, designed to familiarize students with the function of the advertising profession, covers consumer behavior, research and market segmentation. The course examines various kinds of advertising departments as well as the functions of the advertising agency itself — copy, art, media selection, TV/radio production, print production and account management. Students will prepare print advertisements and produce TV and radio commercials. Three contact hours.

AER — Automotive/Engine Repair

AER 1100 Engines 4 cr.

This course is designed to provide instruction in the repair, diagnosis and tuning of engines in both classroom and laboratory conditions. Toyota T-Ten training on Toyota engines and training on American built engines will be provided. Eight contact hours: four lecture hours, four laboratory hours. (CBE)

AER 1310 Automotive Electrical Systems 4 cr.

This course is designed to teach entry-level skills in mechanics. Topics include engine electrical systems, starting systems, charging systems, accessory systems, basic emission controls and an introduction to computer control systems. Both lecture and shop experiences will be provided. This course will also include the complete Toyota electrical mastery series (Toyota course numbers 622 and 652). Eight contact hours: four lecture hours, four laboratory hours. (CBE)

AER 1410 Brake Systems 4 cr.

This course is designed to teach job entry skills in the theory, operation and repair of brake systems, including both drum and disc brakes. Also presented will be an introduction to anti-lock brake systems. Instruction will combine both lecture and shop experience. In addition, students will receive Toyota T-Ten training in braking systems (Toyota course number 550). Eight contact hours: four lecture hours, four laboratory hours. (CBE)

AER 1450 Steering and Suspension 4 cr.

This course is designed to teach entry-level skills in the service and repair of steering and suspension systems, power steering, wheels and tires. Both lecture and shop experience will be provided. In addition, students will receive Toyota T-Ten training in suspension systems (Toyota course number 450). Eight contact hours: four lecture hours, four laboratory hours. (CBE)

AER 1610 Air Conditioning and Heating 4 cr.

This course is designed to teach entry-level skills in the theory, service and repair of automotive heating and air conditioning systems. It will include both classroom lecture and shop experience. In addition, students will receive Toyota T-Ten training to include Toyota course number 726, Toyota climate control systems. Eight contact hours: four lecture hours, four laboratory hours. (CBE)

AER 2251 Advanced Automatic Transmissions 3 cr.

Prerequisites: AER 1310 and AER 2260. This course is an advanced study of automotive automatic transmissions. Students are expected to have a basic knowledge of electrical systems, engine operation, fuel systems, drivability diagnosis and automatic transmission operation prior to enrolling. This course will concentrate on the automatic transmission as used in today's vehicles, including instruction in overdrive transmission and lock-up torque converters, electronic shift controls and all-wheel drive systems. In addition, students will receive Toyota T-Ten training in transmission and drive trains (Toyota course numbers 261, 270 and 305). Six contact hours: three lecture hours, three laboratory hours.

AER 2260 Clutch and Transmissions 4 cr.

This course seeks to develop entry-level skills in the theory and repair of clutches, manual and automatic transmissions, and transaxles. Also included are final drive and differential assemblies. Instruction will combine lecture and shop experience. In addition, students will receive Toyota T-Ten training in automatic and manual transmissions (Toyota course numbers 245 and 301). Eight contact hours: four lecture hours, four laboratory hours. (CBE)

AER 2311 Advanced Electrical 3 cr.

Prerequisite: AER 1310. This course is an advanced study of automotive electrical and electronic systems. Students are expected to have a basic knowledge of electrical systems, engine operation, fuel systems and drivability diagnosis prior to enrolling. The course will concentrate on electronic vehicle controls including fuel injection, feedback systems, climate controls and other computer controlled systems. Parts of the General Motors Specialized Electronics Training (SET) course will be used. In addition, students will receive Toyota T-Ten training in electrical systems (Toyota course number 672). Six contact hours: three lecture hours, three laboratory hours.

AER 2520 Fuel and Emission Control Systems 4 cr.

Prerequisite: AER 1100 or consent of instructor. This course is designed to teach entry-level skills in fuel and emission control systems. Also included are computer control and fuel injection. Both lecture and shop experience will be utilized. In addition, students will receive Toyota T-Ten training in emission controls, carburetors, fuel injection and engine control systems (Toyota course numbers 812 and 825). Eight contact hours: four lecture hours, four laboratory hours.

AER 2522 Drivability and Diagnosis 4 cr.

Prerequisites: AER 2520 and AER 1310. This course is designed to teach job entry skills in the diagnosis and repair of drivability problems. Topics covered include engine performance and electrical and computer system operations. Emphasis is placed on manufacturer's diagnostic charts and advanced diagnostic equipment. Use of scanners on both carburetor and fuel injected vehicles will be addressed. Eight contact hours: four lecture hours, four laboratory hours.

AER 2523 Applied Automotive Diagnosis 3 cr.

Prerequisite: AER 2522. This course is an advanced study of automotive diagnostic equipment and techniques. Students are expected to have a basic knowledge of electrical systems, engine operation, fuel systems and drivability diagnosis prior to enrolling. The course will concentrate on electronic engine controls including fuel injection, feedback systems and computer controlled engine management systems. In addition, students will receive Toyota T-Ten training in fuel injection and import engine controls (Toyota course number 840). Six contact hours: three lecture hours, three laboratory hours.

AMH — American History

AMH 2010 United States History to 1865 (Y) 3 cr.

This course emphasizes the European background, Revolution, Articles of Confederation, the U.S. Constitution, problems of the new republic, sectionalism, manifest destiny, slavery and the War Between the States. The course includes reading and writing competencies. This course serves to meet the Gordon Rule writing requirement. Three contact hours. (CBE)

AMH 2020 United States History From 1865 to the Present (Y) 3 cr.

This course includes the Reconstruction, growth of big business, the Agrarian Revolt, Latin American affairs, the progressive movement, World War I and political, economic and world affairs since World War II. Three contact hours. (CBE)

AMH 2070 History of Florida (Y) 3 cr.

This course in the history of Florida emphasizes the explorations, U.S. acquisitions, Convention of St. Joseph, Civil War and Reconstruction, and Florida's growth in the 20th Century. Three contact hours.

AMH 2092 African-American History and Culture (From African Origins Through Reconstruction) (Y) 3 cr.

This survey course deals with the trends, institutions, events and personalities of black people in the American past, including a brief treatment of the African origin, the development of slavery, the black people during the Revolutionary War and the black people during the Civil War and Reconstruction. This course stresses the origin of racism, general minority problems, cultural appreciation and black ideas. Three contact hours.

AMH 2093 African-American History and Culture (From World War I to the Present) (Y) 3 cr.

This course is a sequential continuation of African-American History and Culture (From African Origins Through Reconstruction) with special emphasis on how the American government's reversal of sentiment caused the failure of the Reconstruction Act. It also focuses on the government's failure to enforce the 15th amendment rights of African-Americans. The course demonstrates how these two events set the stage for subsequent African-American political movements from the post reconstruction era until the present including the race riots of 1910, 1919, the Civil Rights Movement as well as the rise of Black Nationalism and cultural nationalism in America. Three contact hours.

AML — American Literature

AML 2012 American Literature: Colonial Times to 1900 (Y) 3 cr.

Prerequisite: ENC 1101 with a grade of "C" or better. This course is a critical study in selections from American literature: colonial period to the late 19th century. This course serves to meet the Gordon Rule writing requirement. Three contact hours. (CBE)

AML 2022 American Literature: 1900 to the Present (Y) 3 cr.

Prerequisite: ENC 1101 with a grade of "C" or better. This course is a critical study of selections from American literature: late 19th century to the present. This course serves to meet the Gordon Rule writing requirement. Three contact hours. (CBE)

AML 2600 Introduction to African-American Literature (Y) 3 cr.

Prerequisite: ENC 1101 with a grade of "C" or better. This course is a survey course that treats the major periods of African-American literature from its beginnings in America to the present. Attention will be given to the African background. Concentration centers on the writers' views of themselves and the political, economic and social forces that operate on them. Three contact hours.

ANT — Anthropology

ANT 2410 Cultural Anthropology (Y) 3 cr.

This course consists of the study of humanity, the concept of culture and components of culture with emphasis on the different cultural adaptations of humanity worldwide. Three contact hours.

ANT 2511 Physical Anthropology (Y) 3 cr.

This course consists of the study of the human as a biological and cultural animal, including evolutionary adaptations and the human place in the ecological system. Three contact hours.

APA — Applied Accounting

APA 1001 Applied Accounting 3 cr.

This course will consist of the practical application of basic accounting principles and practices including data accumulation systems, income measurement, valuation of assets and liabilities and the study of financial statements. The course includes problems for both a service-oriented business and a merchandising concern. Emphasis will be placed on the following topics: the accounting cycle, journalizing and posting, adjusting and closing entries, worksheets, and preparing financial statements. Other topics will include receivables and payables, payroll, internal control procedures, and the use of data processing in accounting. Three contact hours.

ARA — Arabic Language

ARA 1000 Conversational Arabic (Y) 3 cr.

This course concentrates on the development of oral and conversational skills in the language. Communicative habits and cultural patterns that influence everyday conversation will be included. Visual and auditory aids will be used; students are expected to work independently in the language lab and with audio tapes. This course is designed for everyday use of the language; it will not fulfill the general education foreign language requirements of the State University System. Three contact hours (unsupervised lab work).

ARH — Art History

ART COURSES (VISUAL ARTS)

Lecture Courses

ARH 1000 Art Appreciation (Y) 3 cr.

Prerequisite: ENC 1101 or satisfactory score on placement test. This course supplies non-art majors with a foundation for understanding the visual arts through introduction to different media of art expression. This course includes reading and writing competencies. Three contact hours.

ARH 2004 Introduction to Non-Western Art (Y) 3 cr.

This course is an introduction to the art forms of African, Pre-Columbian, Native American and Oceanic cultures. Three contact hours.

ARH 2050 Art History I (Y) 3 cr.

Prerequisite: ENC 1101 or satisfactory score on placement test. This course includes a historical and critical study of painting, sculpture and architecture from prehistoric times to the Renaissance. This course includes reading and writing competencies. Three contact hours. (CBE)

ARH 2051 Art History II (Y) 3 cr.

Prerequisite: ARH 2050, ENC 1101 or satisfactory score on placement test. This course is a continuation of the history and criticism of art from the Renaissance to the present. This course includes reading and writing competencies. Three contact hours.

ARH 2550 Overview of Chinese Art (Y) 1 cr.

This course is an overview of the outstanding characteristics of the visual arts of China. Painting, sculpture, architecture and ceramics will be investigated. One contact hour.

ARH 2553 Overview of Japanese Art (Y) 1 cr.

This course is an overview of the outstanding characteristics of the visual arts of Japan. Painting, sculpture, architecture and printmaking will be investigated. One contact hour.

ARH 2941 Gallery Practicum (Y) 1 cr.

Prerequisite: ARH 1000 or consent of the instructor. This course offers students the practical experience of organizing gallery exhibitions including exhibit development, promotion, installation, space, design and publicity as well as the other issues involved in exhibit organization. Gallery director lectures will be included. One contact hour.

ART — Art

FOUNDATION COURSES

Design

ART 1001C Studio Art for Beginners and Non-majors (Y) 3 cr.

This course is designed for beginners or non-art majors with little or no previous art experience. A sampling of drawing, printing, sculpture, ceramics and other popular crafts and art forms will be studied through discussions and studio work. Those desiring more in-depth study should enroll in specific studio courses. Six contact hours: two lecture hours, four laboratory hours.

ART 1006C Artists' Tools and Equipment (Y) 1 cr.

This course is an introduction to safety practices, hand and power tools, materials and processes used in making art. Two contact hours: one lecture hour, one studio hour.

ART 1201C Design I (Y) 3 cr.

This course is an introduction to the field of the visual arts through the study of the elements and principles of design. The course explores a variety of materials and techniques with emphasis on line, color, texture, form and in two-dimensional space organizations. Six contact hours: two lecture hours, four studio hours.

ART 1203C Design II (Y) 3 cr.

Prerequisite: ART 1201C. This course continues the study of the elements and principles of design. The course explores a variety of materials and techniques with emphasis on three-dimensional space organization. Six contact hours: two lecture hours, four studio hours.

ART 2808C Advanced Interdisciplinary Studies (Y) 3 cr.

Prerequisites: ART 1201C, ART 1203C, ART 1300C, ART 1301C and completion of two semesters of an advanced 2000 level studies course or consent of both instructor and department chairperson. This course is designed for advanced students who would like to expand their art experience without restricting themselves to a single medium or discipline. Critical thinking, experimentation and problem solving will be achieved through an in-depth study of cross-media art making. Six contact hours: two lecture hours, four laboratory hours.

ART 2955 Fine Art Portfolio (Y) 1 cr.

This course will provide students the necessary skills to put together and present a portfolio of artwork. Topics include image presentation, photographing works and preparing a resume. One contact hour.

Career Preparation**ART 1831 Art and Business — Studio Planning 1 cr.**

This course is designed to instruct students in determining specific studio needs. The course will provide students with instruction in layout and design, costs and costing, and supplies and equipment sources. One contact hour.

ART 1832 Art and Business — Business Planning 1 cr.

This course is designed to instruct students in the organization of an art business. Students will receive instruction in the fundamental areas of planning, directing, organizing and controlling in a small business. One contact hour.

ART 1945 Art and Business Galleries and Exhibitions (Y) 1 cr.

This course is designed to introduce art students to methods of finding and arranging exhibition opportunities for the sale of their artwork. Students will receive instruction in how to find galleries, prepare and present artwork and how to transport art to exhibitions. One contact hour.

Drawing**ART 1300C Drawing I (Y) 3 cr.**

This course emphasizes the basic discipline of drawing through the use of still life, landscape and the figure. Six contact hours: two lecture hours, four studio hours.

ART 1301C Drawing II (Y) 3 cr.

Prerequisite: ART 1300C. This course is a continuation of Drawing I. Six contact hours: two lecture hours, four studio hours.

STUDIO COURSES**Ceramics****ART 2110C Ceramics: Hand-Building I (Y) 3 cr.**

Students will benefit by taking Drawing I and Design I prior to enrolling in this course. This course introduces the basic methods of ceramic production in hand-building and glaze application. Six contact hours: two lecture hours, four studio hours.

ART 2111C Ceramics: Hand-Building II (Y) 3 cr.

Prerequisite: ART 2110C. This course, a continuation of Ceramics: Hand-Building I, emphasizes creativity and special problems. The course also includes kiln stacking and firing. With consent of the instructor, students may repeat this course twice for additional credit to a maximum of nine credit hours. Six contact hours: two lecture hours, four studio hours.

ART 2112C Ceramics: Wheel Throwing I (Y) 3 cr.

Prerequisite: ART 2110C. This course introduces the basic methods of wheel throwing along with kiln stacking and glazing techniques. Six contact hours: two lecture hours, four studio hours.

ART 2113C Ceramics: Wheel Throwing II (Y) 3 cr.

Prerequisites: ART 2110C and ART 2112C. This course is a continuation of Ceramics: Wheel Throwing I. Emphasis is on perfecting the technique of wheel throwing and on creativity with ceramic sculpture. With consent of the instructor, students may repeat this course twice for additional credit to a maximum of nine credit hours. Six contact hours: two lecture hours, four studio hours.

ART 2115C Glaze Exploration (Y) 3 cr.

Prerequisite: ART 2111C. This course includes practice in the use of the nature of glazing techniques such as Mishika and Sgraffito plus application and testing procedures. Six contact hours: two lecture hours, four studio hours.

Graphics**ART 2222C Introduction to Computer Images I (Y) 3 cr.**

Prerequisites: ART 1201C and ART 1300C. This course is an introduction to the microcomputer as a tool for the visual arts. The course selects from a variety of imaging software and requires no computer experience. Six contact hours: two lecture hours, four laboratory hours.

ART 2223C Introduction to Computer Images II (Y) 3 cr.

Prerequisite: ART 2222C. This course is a continuing study of the microcomputer as a tool for the visual arts. A course in combining 2-D, 3-D, animation, motion pictures, video, and audio, with photography, digital draw and paint programs, and outputting to video tape and other permanent storage. Six contact hours: two lecture hours, four laboratory hours.

Jewelry

ART 2150C Jewelry Fabrication (Y) 3 cr.

Prerequisites: ART 1201C and ART 1300C. This course emphasizes creative jewelry construction and design techniques. Development of general skills in materials and processes to promote individual creativity in jewelry production will be discussed. Six contact hours: two lecture hours, four laboratory hours.

ART 2151C Jewelry Casting (Y) 3 cr.

Prerequisite: ART 2150C. This course emphasizes creative casting and enameling techniques with a focus on individual creativity and uniqueness. Six contact hours: two lecture hours, four laboratory hours.

Painting

ART 1563C Mural Painting I (Y) 3 cr.

Prerequisite: ART 1201C, ART 1300C, ART 2510C or consent of instructor. This course introduces art students to the techniques specific to large scale painting on canvas and architectural sites. Mural painting combines and enhances all of the basic two-dimensional art skills learned in design, drawing and painting. Projects include small scale design and actual large scale "on-site" painting. Students will also become familiar with the historical and conceptual precedents for large scale painting from the past 3,000 years. Six contact hours: two lecture hours, four laboratory hours.

ART 1564C Mural Painting II (Y) 3 cr.

Prerequisite: ART 1201C, ART 1300C, ART 1563C, ART 2510C or consent of instructor. A continuation of Mural Painting I, this course gives students an opportunity to further develop techniques specific to large scale painting on canvas and architectural sites with an emphasis on alternative tools and advanced painting techniques. With consent of the instructor, students may repeat this course twice for additional credit to a maximum of nine credit hours. Six contact hours: two lecture hours, four laboratory hours.

ART 2510C Painting I (Y) 3 cr.

Prerequisite: ART 1301C. This course introduces students to basic oil painting techniques and color theory. Projects designed to lead students toward more independent concepts, include standard subjects such as still life, landscape, portrait and figure painting. Six contact hours: two lecture hours, four studio hours.

ART 2520C Painting II (Y) 3 cr.

Prerequisite: ART 2510C or consent of instructor. This course, a continuation of Painting I, encourages students to plan independent projects, working within certain broad

guidelines as to subject matter and technical approach. Individual interests and strengths are part of the planned program for students; however, the course requires a certain specific number of paintings during the semester. With consent of the instructor, students may repeat this course twice for additional credit to a maximum of nine credit hours. Six contact hours: two lecture, four studio hours.

ART 2540C Introduction to Watercolor (Y) 3 cr.

This course introduces students to the methods and materials involved in several water media including tempera, gouache, acrylic and watercolor with emphasis on traditional watercolor techniques. Six contact hours: two lecture hours, four laboratory hours.

ART 2550C Advanced Watercolor (Y) 3 cr.

Prerequisite: ART 2540C. This course continues the investigation of methods and materials begun in Introduction to Watercolor with emphasis again on watercolor technique. Students are encouraged to develop a personal expression with the medium. With consent of the instructor, students may repeat this course twice for additional credit to a maximum of nine credit hours. Six contact hours: two lecture hours, four laboratory hours.

PGY — Photography

PGY 2104C Creative Photography (Y) 3 cr.

Prerequisite: PGY 2401C or portfolio. This is an intermediate level photography course designed to pursue historical, creative and manipulative techniques in alternative methods of photography. With consent of the instructor, students may repeat this course for additional credit to a maximum of nine credit hours. Six contact hours: two lecture hours, four laboratory hours.

PGY 2401C Photography I (Y) 3 cr.

This course is an introduction to the use of the camera, laboratory and materials, and methods and procedures for the creative applications of individual expressions in photography. Students must have a 35mm camera or equivalent. Six contact hours: two lecture hours, four laboratory hours.

PGY 2410C Photography II (Y) 3 cr.

Prerequisite: PGY 2401C. This course, a continuation of Photography I, emphasizes black and white and color processing. With consent of the instructor, students may repeat this course twice for additional credit to a maximum of nine credit hours. Six contact hours: two lecture hours, four laboratory hours.

ART Printmaking

ART 2400C Printmaking I (Y) 3 cr.

Prerequisite: ART 1300C or ART 1301C. This course consists of instruction in line etching, tone etching, intaglio printing and relief printing. Six contact hours: two lecture hours, four laboratory hours.

ART 2401C Printmaking II (Y) 3 cr.

Prerequisite: ART 2400C. This course, a continuation of Printmaking I, presents a more detailed study of intaglio

materials and techniques. With consent of the instructor, students may repeat this course twice for additional credit to a maximum of nine credit hours. Six contact hours: two lecture hours, four studio hours.

ART 2430C Serigraphy I (Y) 3 cr.

Prerequisite: ART 1201C. This course includes an introduction to the basic techniques of serigraphy, including standard stenciling processes such as cut stencil and glue stencil. Six contact hours: two lecture hours, four laboratory hours.

ART 2431C Serigraphy II 3 cr.

Prerequisite: ART 2430C. This course is a continuation of Serigraphy I and is designed to develop technical skills in handling advanced art printing processes including photo-silk screening and multi-color registration prints. With consent of the instructor, students may repeat this course twice for additional credit to a maximum of nine credit hours. Six contact hours: two lecture hours, four laboratory hours.

Sculpture

ART 2701C Sculpture I (Y) 3 cr.

This course, designed for beginning sculpture students, emphasizes modeling and casting techniques in materials such as clay and plaster. Six contact hours: two lecture hours, four studio hours.

ART 2702C Sculpture II (Y) 3 cr.

Prerequisite: ART 2701C or consent of the instructor. This course, a continuation of Sculpture I, explores new and more advanced techniques and materials with individual projects encouraged. With consent of the instructor, students may repeat this course for additional credit to a maximum of nine credit hours. Six contact hours: two lecture hours, four studio hours.

Textiles

ART 1130C Textile Design (Y) 3 cr.

This course is an introduction to textile processes including silkscreen printing, batik, tie dye and block printing. Six contact hours: two lecture hours, four studio hours.

ART 2101C Crafts as an Element of Design (Y) 3 cr.

This course, an introduction to contemporary and traditional crafts, includes weaving, batik, silk screening, tie dye, block printing and leather crafts. Students may repeat this course for additional credit for up to a combined total of two semesters with a maximum of six semester hours total credit. With consent of the instructor, students may repeat this course twice for additional credit to a maximum of nine credit hours. Six contact hours: two lecture hours, four studio hours.

Weaving

ART 2131C Beginning Weaving (Y) 3 cr.

This course is an introduction to fiber processes including off-loom techniques, primitive loom construction and weaving, and simple four-harness loom weaving. Techniques include coiling, twining, dyeing, knotting, tapestry and twill variations. Six contact hours: two lecture hours, four studio hours.

ART 2135C Intermediate Weaving (Y) 3 cr.

Prerequisite: ART 2131C or consent of the instructor. This course supplements beginning weaving and increases students' weaving vocabulary. Processes include double weave, supplemental weft techniques, pattern drafting and color study. Six contact hours: two lecture hours, four studio hours.

ART 2136C Advanced Weaving (Y) 3 cr.

Prerequisites: ART 2131C and ART 2135C or consent of the instructor. This course, designed for experienced weavers who want to investigate advanced processes and further skills, emphasizes the aesthetic handling of fibers. With consent of the instructor, students may repeat this course twice for additional credit to a maximum of nine credit hours. Six contact hours: two lecture hours, four studio hours.

ASC — Aeronautical Science

ASC 1010 History of Air Transportation/National Airspace System (Y) 3 cr.

This course is designed to present a chronological history of man's conquest for flying, an overview of the problems implementing the National Airspace System, airspace allocation, safety of flight, accident analysis, new developments in navigation, ATC systems, and economic, social and political impacts. Three contact hours. (CBE)

ASC 1210 Aviation Weather (Y) 3 cr.

This course consists of the fundamentals of aviation meteorology and its effects on aircraft and the air traffic control system. Three contact hours. (CBE)

ASC 1310 Federal Air Regulations/Legislation 3 cr.

This course is designed to familiarize students with the Federal Aviation regulations, contracts, insurance, liability, regulatory statutes and case law as relating to pilots, aircraft operations and air traffic control. Three contact hours. (CBE)

ASC 2110 Advanced Air Navigation 3 cr.

Prerequisite: FAA private pilot certificate. This course is designed for aviation students who desire to achieve a level of competence and understanding of air navigation above the minimum required to pass the various FAA written tests. The course includes advanced automatic direction finding (ADF) techniques, advanced VHF omni range (VOR) techniques, flight planning, weather, chart construction and plotting, LORAN navigation techniques, RNAV techniques and navigation computer techniques. The FAA's direct user access terminal (DUAT) system will be used extensively during the course, which is equally appropriate for VFR private pilots and those pilots with advanced certificates and instrument ratings. Three contact hours: two lecture/discussion hours, one laboratory hour. (CBE)

ASH — Asian History

ASH 2005 History of the Far East (Y) 3 cr.

This course consists of the history of the Far East from early modern times with emphasis on China and Japan. Three contact hours.

AST — Astronomy

AST 1002 Introduction to Astronomy (Y) 3 cr.

Corequisite: AST 1002L. Students will benefit by taking high school algebra or MAT 0024 prior to enrolling in this course. This is a general education course and is not intended for students who are going to major in astronomy or other sciences. Students will become acquainted with the solar system with emphasis on Earth and its satellite, the moon. Students will also study other planets, satellites, comets, meteors, the Milky Way and other galaxies, and the theories of the universe. The course will discuss the stars and planets relevant to the most modern ideas. Three contact hours. (CBE)

AST 1002L Astronomy Laboratory (Y) 1 cr.

Corequisite: AST 1002 or following AST 1002. This is a laboratory course which is intended to supplement AST 1002, Introduction to Astronomy. Students should have a working knowledge of mathematics at a level equivalent to MAT 0024. Students will learn to use various types of equipment and simple procedures for obtaining useful data. Two contact hours (laboratory).

ATF — Aviation Technology Flight

ATF 1000 Basic Flight I 3 cr.

Prerequisites: Federal Aviation Administration (FAA) Class III medical certificate/student pilot license and consent of instructor. It is strongly recommended that ATT 1100 Private Pilot Ground School be completed prior to starting this course, which consists of off-campus instruction and flight training necessary for students to accomplish a first solo flight in an airplane. The FCCJ instructor will assist students in selecting the flight school and will screen the selected school and flight instructor on the students' behalf. The FCCJ instructor will counsel students on the challenges involved in flight training and will participate in periodic progress checks with students and flight instructors. In addition, the FCCJ instructor will be available to students for individual assistance. The cost to students for the off-campus flight training required to complete this course will be approximately \$600 in addition to FCCJ tuition. The stages students will progress through in achieving a high degree of flying proficiency in basic flight maneuvers are pre-solo, supervised solo, basic flying techniques and solo practice. Three contact hours: one lecture hour, two laboratory hours. (CBE)

ATF 1100 Basic Flight II 3 cr.

This course is a continuation of Basic Flight I and consists of the off-campus instruction and flight training required to complete the FAA private pilot practical test (flight check). At the completion of this course, students will have earned the FAA private pilot's certificate. The cost to students for the off-campus flight training required to complete this course will be approximately \$2,000 in addition to FCCJ tuition. The stages students will progress through are pre-solo cross country, solo cross country, private pilot certificate review, advanced night operations and introduction to advanced and precision maneuvers. Three contact hours: one lecture hour, two laboratory hours. (CBE)

ATF 1104 Primary Flight 4 cr.

Prerequisites: FAA student pilot certificate and FAA Class III medical certificate. Corequisite: ATT 1100. This course consists of the briefing, debriefing, dual flight instruction, simulator instruction and supervised solo flight required in order for students to obtain the Federal Aviation Administration (FAA) private pilot, airplane single engine I certificate. The number of flight hours provided during the course is based on the number required by Federal Aviation Regulations. Additional flight time may be required depending on student aptitude, study habits and calendar time available to complete the course in a timely manner. The actual flight and simulator training is provided by the FAA approved, FAR part 141 contractor flight school. The actual calendar time required to complete the course will vary based upon both the weather and student aptitude and study habits. Six contact hours: three lecture/discussion hours, three laboratory hours. (CBE)

ATF 2200 Instrument Flight (Y) 4 cr.

Prerequisite: FAA private pilot's certificate. Corequisite: ATT 1120. This course consists of the briefing, debriefing, dual flight instruction and simulator instruction required for students to obtain the FAA instrument rating, airplane. The number of flight hours provided during the course is based on the number required by Federal Aviation Regulations. Additional flight hours may be required depending on individual abilities. The flight and simulator training is provided by the FAA approved, FAR part 141 contractor flight school. Six contact hours: two lecture hours, four laboratory hours. (CBE)

ATF 2400 Commercial Flight 5 cr.

Prerequisites: FAA Class II medical certificate and FAA private pilot, airplane certificate. Corequisite: ATT 1110. This course consists of the briefing, debriefing, dual flight instruction and pilot-in-command flight required for students to obtain the FAA commercial pilot, airplane single engine certificate. The number of flight hours provided during the course is based on the number required by Federal Aviation Regulations. Additional flight hours may be required based on individual abilities. The flight training is provided by the FAA approved FAR, part 141 contractor flight school. Seven contact hours: three lecture hours, four laboratory hours. (CBE)

ATF 2530 Advanced Flight 2 cr.

Prerequisite: ATF 2400. This course consists of the briefing, debriefing, other ground instruction, dual flight instruction and supervised solo flight required for students to obtain the federal aviation administration (FAA) certified flight instructor certification with either the single-engine or multi-engine or instrument ratings; or the multi-engine pilot rating on their commercial pilot certificate. The number of flight hours provided during the course is based on the number required by Federal Aviation Regulations (FAR). Additional flight hours above the FAR requirements may be required to meet the proficiency required for the rating. The flight and ground training is provided by an approved contractor flight school. The actual calendar time required to complete the course will vary with weather and the individual student's aptitude and study habits. Four contact hours: two lecture/discussion hours, two laboratory hours. (CBE)

ATT — Aviation Technology Theory

ATT 1100 Private Pilot Ground School 3 cr.

This course, consisting of classroom instruction in preparation for FAA private pilot written examination, includes the science of flight, airplane systems and instruments, weight, balance and performance, meteorology, physiology of flight, basic navigation, radio navigation, air traffic control and communications, airman's information manual and Federal Aviation Regulations. Three contact hours. (CBE)

ATT 1110 Commercial Pilot Ground School 3 cr.

Prerequisites: Class II medical certificate and FAA private pilot certificate. This course, consisting of classroom instruction in preparation for the FAA commercial pilot, airplane written test, includes Federal Aviation Regulations, flight operations, aerodynamics, aviation weather, charts, instruments, navigation, performance, and weight and balance. The FAA commercial pilot, airplane written test will be offered as an option immediately following the course. Three contact hours. (CBE)

ATT 1120 Instrument Rating Ground School 4 cr.

Prerequisite: FAA Private Pilot Certificate. This course prepares students for the FAA instrument pilot written test, reviews aircraft systems and instruments, advanced meteorology, and the air traffic control system, terminology and radar. The course concentrates on IFR shorthand, IFR approach plates, enroute charts, IFR flight planning, regulations and procedures. Four contact hours. (CBE)

ATT 1810 Environment of the Air Traffic Controller 3 cr.

This course presents a candid look at the air traffic controller's language, tools and profession. Three contact hours. (CBE)

AVM — Aviation Management

AVM 2941 Facility Internship/Flight Safety 4 cr.

Prerequisite: ATT 1810. This course is designed to present an analysis of factors and procedures relating to aviation safety programs, accident investigations/analysis, physiological/psychological human factors and the effect of weather. The course includes familiarization with the air traffic control system via on-site orientation visits to flight service stations, control towers, approach control facilities, air route traffic control centers, weather centers and radar sites. Four contact hours: one lecture hour, three laboratory hours. (CBE)

BAN — Banking

BAN 1004 Principles of Bank Operation 3 cr.

This course touches on nearly every aspect of banking, providing a comprehensive introduction to the diversified services and operations of the banking industry today. The history, evolution and trends of banking are explored as well as the documents, language and services of banking. Three contact hours. (CBE)

BAN 2240 Consumer Lending 3 cr.

This course is designed to provide accurate and authoritative information regarding consumer lending. Emphasis is placed on all types of credit including installment and single payment loans extended to individuals primarily for the purpose of buying goods and services for their personal consumption. This course also covers theory needed by students to administer the full spectrum of collection activities while simultaneously maintaining good customer relations. Three contact hours.

BAN 2501 Money and Banking (Y) 3 cr.

Prerequisite: ECO 2013 (recommended but not required). This course provides students with the key concepts, theories and processes that link money and banking to the workings of the U.S. economy. The role money and the money supply play in the economy and the role the banks play as money creators are explored in this course. Financial intermediaries, bank operations, the Federal Reserve, tools of monetary and fiscal policy, monetary theory and international banking are all topics covered in Money and Banking. Three contact hours. (CBE)

BCN — Building Construction

BCN 1001 Introduction to Building Construction (Y) 3 cr.

This course is an introduction to residential and commercial building construction. It is an overview of principles and practices used by engineers, architects and contractors in the planning and erecting of buildings. An examination of building codes and regulations is included. Three contact hours. (CBE)

BCN 2614 Planning and Estimating 3 cr.

Prerequisites: BCN 1001 and ETI 1420. This course consists of a study of fundamental planning and a step-by-step method for preparing a quantity survey. The subjects covered in the course include job requirements, costs of construction operations and critical path method (CPM) of scheduling and preparing estimates in accordance with the C.S.I. format. Four contact hours: two lecture hours, two laboratory hours. (CBE)

BCT — Building Construction Trades

BCT 1113 Blueprint Reading 2 cr.

This course teaches the fundamentals of blueprint reading and sketching common to all the construction trades. The course covers plans, elevations, shapes, details, and views in sections. Two contact hours.

BOT — Botany

BOT 1010C Botany (Y) 4 cr.

An evolutionary survey of the plant kingdom, this course emphasizes the principles which are applicable to all forms of plant life. Six contact hours: three lecture hours, three laboratory hours.

BOT 2153C Local Flora (Y) 4 cr.

Prerequisite: BOT 1010C or consent of instructor. Survey of local vascular flora and local communities (northeast Florida) and evolutionary relationships of vascular plants.

Laboratory work will emphasize field work including collecting and identifying vascular plants. Six contact hours: three lecture hours, three laboratory hours.

BSC — Biological Science — Introductory

BSC 1005 Life in Its Biological Environment (Y) 3 cr.

This course is an introduction to biological structure, function processes, principles and concepts. This course fulfills the General Education Requirement. Three contact hours. (CBE)

BSC 1005L Biology Laboratory (Y) 1 cr.

Corequisite: BSC 1005. This course provides students individualized, self-paced practice in specific areas of need as they attempt to improve biological skills. Two contact hours (laboratory).

BSC 2010C Principles of Biology I (Y) 4 cr.

This course, an introduction to the principles of biology, includes studies of cellular organization, genetics and evolution. This course fulfills the General Education Requirements and the laboratory requirement needed by many students who plan to transfer to a four-year institution. Five contact hours: three lecture hours, two laboratory hours. (CBE)

BSC 2011C Principles of Biology II (Y) 4 cr.

Prerequisite: BSC 2010C. This course, a continuation of Principles of Biology I and recommended for science students transferring to four-year institutions studies the systematics of life forms and a required laboratory experience to reinforce subject matter. Five contact hours: three lecture hours, two laboratory hours.

BSC 2023C Human Biology (Y) 4 cr.

Prerequisite: BSC 2010C or equivalent. This course is an introduction to the science of biology with emphasis on cells and tissues, body organization, homeostasis, body systems, regulation and integration of body parts, reproduction, development and heredity, disease and disorder. Five contact hours: three lecture hours, two laboratory hours.

BSC 2085C Human Anatomy and Physiology I (Y) 3 cr.

This course, a study of the gross morphology and physiology of the human, includes sections concerned with cells, tissues, the musculo-skeletal system, circulation, the lymphatic system, the digestive system and the integument. Four contact hours: two lecture hours, two laboratory hours.

BSC 2086C Human Anatomy and Physiology II (Y) 3 cr.

Prerequisite: BSC 2085C. A continuation of Human Anatomy and Physiology I, this course covers the nervous system, special senses, the endocrine system, the reproductive system, human inheritance and embryonic development, the respiratory system, the urinary system, and fluid and electrolyte dynamics. Four contact hours: two lecture hours, two laboratory hours.

BSC 2931 Selected Topics in Biological Sciences (Y) 1 cr.

Prerequisite: depends upon topics. Corequisite: depends upon topics. The open format of this course provides an opportunity to address various selected topics related to the biological sciences. This course may be repeated for credit. One contact hour.

BSC 2932 Selected Topics in Biological Sciences (Y) 2 cr.

Prerequisite: depends upon topics. Corequisite: depends upon topics. The open format of this course provides an opportunity to address various selected topics related to the biological sciences. This course may be repeated for credit. Two contact hours.

BSC 2933 Selected Topics in Biological Sciences (Y) 3 cr.

Prerequisite: depends upon topics. Corequisite: depends upon topics. The open format of this course provides an opportunity to address various selected topics related to the biological sciences. This course may be repeated for credit. Three contact hours.

BUL — Business Law

BUL 2130 Business Law I — The Legal Environment of Business (Y) 3 cr.

This course is an introduction to law as it relates to and impacts upon the operation of business. Consideration is given to the Uniform Commercial Code, social forces, governmental regulations, administrative agencies, international law, criminal law, torts, property law, consumer protection and environmental law. Three contact hours. (CBE)

BUL 2242 Business Law II (Y) 3 cr.

Prerequisite: BUL 2130. This course covers advanced subjects in business law with emphasis on sales, contracts and commercial paper. These subjects will be helpful to students preparing for professional certification in areas such as accounting and real estate. Three contact hours.

CCJ — Criminology and Criminal Justice

CCJ 1010 Introduction to Criminology (Y) 3 cr.

The course provides a survey of deviant behavior as related to the concept and definition of crime, the concept and purposes of the law, the measurement and causes of crimes and societal reactions to criminal behavior from historical through contemporary periods. Oral presentations by students are required. Three contact hours.

CCJ 1020 Introduction to Criminal Justice (Y) 3 cr.

This introduction to the philosophical and historical backgrounds of law enforcement includes the study of the organization, purpose, functions and processes of law enforcement, private security operations, privatization of correctional institution and other agencies involved in the administration of criminal justice in the United States. Three contact hours. (CBE)

CCJ 1030 Man, Crime and Society (Y) 3 cr.

This course consists of a basic study of the nature and peculiarities of human behavior in direct relationship to crime and delinquency. Three contact hours.

CCJ 1220 Criminal Law, Evidence and Procedure (Y) 3 cr.

This course consists of the study of the scope, purposes and principles of criminal law, the classification and analysis of crimes and criminal acts in general and the examination of selected specific offenses. Three contact hours.

CCJ 1300 Introduction to Corrections (Y) 3 cr.

With emphasis on career orientation, this course examines the total correctional process from law enforcement through the administration of justice, probation, prisons and correctional institutions, and parole. Three contact hours.

CCJ 1400 Police Administration (Y) 3 cr.

This course presents the principles of organization and administration in law enforcement including functions and activities, planning and research, public relations, personnel and training, inspection and control, records and communications and custody. Oral presentations by students are required. Three contact hours.

CCJ 2230 Criminal Evidence and Procedure (Y) 3 cr.

This course consists of the study and examination of the criminal rules of evidence — kinds, degrees, admissibility, competence and weight — specifically as they affect the law enforcement officer in the processes of arrest, force, search, seizure, preservation, custody, testimony and courtroom procedures. Three contact hours.

CCJ 2250 Constitutional Law (Y) 3 cr.

This study of the United States and Florida constitutions presents an in-depth analysis of constitutional law with emphasis in areas of arrest, search and seizure, interrogation, self-incrimination and related topics of interest to law enforcement. The course also includes special emphasis on authority and limitations on police under the Bill of Rights. Three contact hours.

CCJ 2330 Probation, Pardon and Parole (Y) 3 cr.

This course examines, as community based correctional programs, probation as a judicial process and parole as an executive function. The course also reviews the use of pardons. Three contact hours.

CCJ 2340 Treatment Techniques and Practices (Y) 3 cr.

This course evaluates the basic principles of the techniques of changing attitude and behavior. The course also reviews the individual and group approaches to counseling. Three contact hours.

CCJ 2360 Advanced and Contemporary Issues in Corrections (Y) 3 cr.

This course describes and evaluates modern trends in corrections, such as the community based programs in

work-release, halfway houses, contact program planning, as well as the therapeutic community and treatment concept in institutions. Three contact hours.

CCJ 2500 Juvenile Delinquency (Y) 3 cr.

This course presents the major issues of crime causation, rehabilitation and juvenile delinquency participation among the lower, middle and upper social classes. The course also covers the process of handling juvenile delinquents from confrontation with authorities, to detention, to release and aftercare. Three contact hours.

CCJ 2667 Victimology 3 cr.

This course covers the role of the victims in the phenomenon of crime and the abuse, rape, elderly victims, victim service programs, and compensation/restitution. Three contact hours.

CCJ 2930 Special Topics/Seminars — Criminology (Y) 3 cr.

Students in this course choose a critical issue in the contemporary law enforcement system to analyze. This analysis provides ideas for improvement which are then shared and critiqued in class. Three contact hours.

CCJ 2933 Special Topics — Corrections (Y) 3 cr.

This course includes research writing and discussion of selected subject areas related to corrections, such as correctional planning for short term offenders and misdemeanants, handling of "unusual" prisoners, classification of offenders, authority and responsibility of correctional officers, professional and legal standards and analysis of contemporary correctional problems. Three contact hours.

CDA — Computer Design/Architecture

CDA 2500 Introduction to Data Communications (Y) 3 cr.

Prerequisite: CGS 1060. This course will provide students with the basic concepts of data communications. It will cover such topics as transmission media, modulation techniques, link control, line protocols and transmission impairments. Lab work will include setting up and using communication software, file transfer, and exploring the Internet. Four contact hours: three lecture hours, one laboratory hour.

CDA 2502 Computer Networks (Y) 3 cr.

Prerequisite: CGS 1060 (Engineering Technology students may substitute CET 1461). Students will study Local Area Networks (LANs), Wide Area Networks (WANs), PC to mainframe connections, LANs gatewayed to mainframe hosts and other distributed systems. Various topologies and connectivity balance will be taught as well as discussions on Router, Gateways, Bridges, and various network operating systems (NOS). The skills taught in this course will enable students to have an understanding of how to build a network. Four contact hours: three lecture hours, one laboratory hour.

CDA 2524 Advanced Computer Networks 4 cr.

Prerequisite: CDA 2502. Students will continue with a study of LANs, MANs, and WANs as begun in the basic introductory course. Various topologies and connectivity techniques will be taught in more depth on topics such as bridges, routers, gateways, troubleshooting tools, and network operating systems. The skills taught in the course will enable students to have a complete understanding of network interoperability and WAN connectivity. Four contact hours: three lecture hours, one laboratory hour.

CDA 2525 Advanced Local Area Network Administration 4 cr.

Prerequisites: CGS 1060 or prior computer experience and CGS 1551 or current Novell CNA certification. The objective of this course is to teach individuals advanced administration of local area network (LAN) operating systems. Students will learn to install network file servers, configure and manage network directory services, partition networks, create replicas, and perform network synchronization. Four contact hours: three lecture hours, one laboratory hour.

CDA 2527 Network Analysis and Design 4 cr.

Prerequisites: CDA 2524 and CDA 2525. This course will review basic LAN interconnectivity concepts and teach students to apply concepts to network design and analysis. The course will cover requirement analysis, problem determination and design implementation. This is an advanced course designed for experienced individuals wishing to broaden their skills to include network design. Four contact hours: three lecture hours, one laboratory hour.

CET — Computer Engineering Technology**CET 1114 Digital Fundamentals (Y) 3 cr.**

Prerequisites: EET 1035 and MAC 1102. This is an introductory course covering basic digital concepts, devices and circuits found in modern digital and computerized equipment. Four contact hours: three lecture hours, one laboratory hour. (CBE)

CET 1461 Computer Applications in Engineering 3 cr.

Prerequisite: MAT 0025 or satisfactory score on placement test. Corequisite: MAC 1102. This course is an introduction to computerized tools for engineering problem solution and reporting. It provides a background in specific computer skills required in the engineering technology area. It includes problem solving using programmable calculators and demonstrates their relationship to computers. It also includes word processing for engineering report writing and requisite Windows and/or DOS skills. Four contact hours: three lecture hours, one laboratory hour.

CET 2123 Microprocessor Fundamentals (Y) 3 cr.

Prerequisite: CET 1114. This course is intended for technicians whose job it is to service systems containing microprocessors. It is a study of the structure and programming of the microprocessor as well as interfacing with peripherals and system troubleshooting. Four contact hours: three lecture hours, one laboratory hour.

CET 2173 Microcomputer Systems Troubleshooting (Y) 3 cr.

Prerequisite: CET 2123. This is a course in diagnostic and repair procedures for microcomputers in a business or industrial environment. The course is intended for computer service technicians and utilizes microcomputers and their peripherals. Four contact hours: three lecture hours, one laboratory hour.

CET 2186 Computer Peripherals and Interfacing 3 cr.

Prerequisite: CGS 1060. This course is intended for non-electronics majors. The course is a study of the interrelationships between the computer control processing unit and peripheral input/output devices with emphasis on interfacing considerations between C.P.U. and series/parallel terminals, general troubleshooting and routine maintenance procedures common to the computer industry as an integral part of the course. Four contact hours: three lecture hours, one laboratory hour. (CBE)

CET 2496 Network Service and Troubleshooting 4 cr.

Prerequisites: CET 2186 and CDA 2502. This course covers the fundamentals of troubleshooting and servicing a wide variety of problems on a local area network. Topics include troubleshooting concepts; research tools used; troubleshooting and using network adapters, printers, cables, and storage devices; troubleshooting the DOS workstation; network disaster recovery, and network optimization. Four contact hours: three lecture hours, one laboratory hour.

CET 2941 Computer Maintenance Practicum (Y) 2 cr.

Prerequisite: CET 2173. This course should be taken during students' last term in the program and enrollment requires consent from the program manager. It is a non-lecture course wherein students perform routine maintenance, troubleshooting and repair on College microcomputer systems. A minimum of four hours per week under close supervision from the College microcomputer specialist will be spent on these activities. Flexible scheduling will be used to spread the number of students evenly over the week's work. Four contact hours (laboratory).

CGS — Computers in General Studies**CGS 1003 Introduction to Using Microcomputers (Y) 2 cr.**

This course is designed to train students to use microcomputers. It includes laboratory exercises in Windows and word processing. Two contact hours.

CGS 1060 Introductory Computer Concepts (Y) 3 cr.

This course, intended for individuals with no previous computing experience, includes the history of computers, a survey of how computers are used today, the basic components of computers and computer terminology and laboratory experiences using application software. A study of information systems and computer careers completes the course. Additional lab time may be required in order to complete application assignments. Four contact hours: three lecture hours, one laboratory hour. (CBE)

CGS 1062 Introduction to Midrange Computer Systems (Y) 3 cr.

Prerequisite: CGS 1060. This course is designed as an introduction to midrange computer systems with major emphasis on the IBM AS/400 with an introduction to Office Vision/400, command language, security, system architecture and utilities. A hands-on approach is used when appropriate. Four contact hours: three lecture hours, one laboratory hour.

CGS 1100 Microcomputer Applications for Business and Economics (Y) 4 cr.

This business oriented course will include training in Windows operating systems, word processing, financial spreadsheets, database applications, and a special topics section that will introduce presentation software, the Internet, World Wide Web browsers, E-mail, local area networks and other contemporary issues as time permits. Four contact hours: three lecture hours, one laboratory hour.

CGS 1550 Local Area Network (LAN) Administration with Windows NT Server 4 cr.

Prerequisite: CGS 1060 or prior computer experience. The object of this course is to teach individuals to administer a Local Area Network (LAN) operating system using Windows NT Server. Students will create LAN user environments, perform resource accounting and management, administer security, setup electronic mail, conduct backup and recovery operations, and install local and remote network print services. Four contact hours.

CGS 1551 Local Area Network (LAN) Administration with Netware 4 cr.

Prerequisite: CGS 1060 or prior computer experience. The objective of this course is to teach individuals to administer Local Area Network (LAN) operating systems. Creating LAN user environments, resource accounting and management, security, electronic mail, backup and recovery operations, and remote network printing will be covered in detail. Four contact hours.

CGS 1564 Introduction to Windows 1 cr.

This course is an introduction to Windows applications. It is intended for the new user who needs to develop skills in all Windows programs. Topics include using the mouse and working with program manager Windows accessories and file manager. One contact hour.

CGS 1570 Microcomputer Applications (Y) 3 cr.

Recommended prerequisite: OST 1100 or keyboarding experience. This course is intended for students with no previous experience in information systems. It orients students to computer operating systems, DOS and Windows, word processing software, spreadsheet software, database software, and business graphics software to solve common problems of the computerized workplace. Four contact hours: three lecture hours, one laboratory hour. (CBE)

CGS 1580 Introduction to Desktop Publishing (Y) 3 cr.

Recommended prerequisite: working knowledge of IBM or Macintosh microcomputers or compatibles and experience with word processing software. This course is designed for individuals who wish to develop desktop publishing skills. Individuals who will benefit from this course include administrative assistants involved in corporate report production, secretaries involved in newsletter production, individuals in the advertising and printing industries, corporate personnel involved with printed communications and writers. The course includes skills leading to the development of newsletters, brochures, technical papers and annual reports. Four contact hours: three lecture hours, one laboratory hour.

CGS 2470 Computer Aided Drafting and Design (Y) 3 cr.

Prerequisite: ETD 1100. (Interior design students may substitute IND 1606 for ETD 1100.) This course provides students with a general understanding of Computer Aided Drafting and Design (CADD) operations. Students will acquire a working knowledge of steps required for initializing commands to the CADD system using the keyboard and the stylus. Students will create drawings using various menus and will command the system to create a fast-plot of any current active drawing in the system. Six contact hours: two lecture hours, four laboratory hours.

CGS 2512 Spreadsheet Concepts and Practices (Y) 3 cr.

This course is designed for individuals who wish to master and use spreadsheet software. The course is directed toward novices, first-time owners of personal or business computers and individuals who would like to learn more about spreadsheet software and operations. Covered in the course are the history and terminology of spreadsheet software, spreadsheet design and construction, and uses of spreadsheet to solve financial problems. Also covered are spreadsheet graphics, spreadsheet database and spreadsheet automation with macros. The course requires use of the IBM personal computers or compatible computers. Four contact hours: three lecture hours, one laboratory hour.

CGS 2525 Introduction to Multimedia (Y) 3 cr.

Prerequisite: CGS 1060, CGS 1570 or working knowledge of computers. This course is designed for individuals who would like to learn multimedia technology. The course will include such topics as determining what technology to use and how to use it most effectively. Computer graphics will be highlighted as well as other visual aids such as charts, posters, slides and transparencies. Audio and other current and cutting-edge technologies used in multimedia presentations will also be explored. Course content emphasizes audience reaction to a presentation. Four contact hours: three lecture hours, one laboratory hour.

CGS 2542 Database Concepts for Microcomputers (Y) 3 cr.

Prerequisite: CGS 1060 or CGS 1570. This course is aimed at familiarizing students with the roles and advantages of databases. A series of database application projects

on microcomputers is designed to build familiarity with creating, loading, maintaining and updating the database. Conducting database queries and building database reports are covered. Four contact hours: three lecture hours, one laboratory hour.

CGS 2555 Introduction to the Internet 4 cr.

This course is designed to provide an overview of the Internet and its most important services. After a short overview of basic computer and networking concepts, the course will focus on how to use and search the Web in addition to creating a personal Web page using HTML. Also, other services available on the Internet will be covered such as Gopher, FTP, Telnet, E-Mail and Usenet. The course also includes a hands-on component that will allow students to develop proficiency in each of the service areas identified above with the Netscape browser or its equivalent. Four contact hours: three lecture hours, one laboratory hour.

CGS 2571 Advanced Microcomputer Applications 3 cr.

Prerequisite: CGS 1570 or equivalent experience; keyboarding skills required. This course is intended for students who have had an introduction to microcomputer applications, and desire instruction in advanced topics using an integrated software suite. The focus of this course will be integration of files between software applications represented in the suite. Additional topics using word processing, spreadsheet, presentation graphics, and database management that are not covered in the introductory course will also be taught. Four contact hours: three lecture hours, one laboratory hour.

CHD — Child Development

CHD 1110 Infant and Toddler Care I (Development) 3 cr.

This course introduces infant and toddler care workers to the stages of human development from birth to three years. The course also covers the impact of health, parenting, environment, nutrition, mental health and self-esteem on normal and abnormal development. This course is useful for CDA (Child Development Associate) documentation. Three contact hours.

CHD 1220 Child Growth and Development I 3 cr.

This course is an introductory study of physical, social, emotional and cognitive development, conception through age six. The course stresses acquisition of skills in child observation and recording and behavior management. It includes Module IV of the HRS Child Care Worker Training course. This course is useful for CDA (Child Development Associate) documentation. Three contact hours. (CBE)

CHD 1380 Curriculum for Young Children I 3 cr.

This course is an introductory study of safety, health, physical, cognitive and program environment from pre-school years through age eight. This course is designed to assist students in the development of creative age appropriate activities to help school age children achieve classroom success. Three contact hours.

CHD 1381 Curriculum for Young Children II 3 cr.

Prerequisite: CHD 1380. This course is designed to provide students with training and knowledge as they develop new skills that will assist in providing age appropriate activities in the area of cognitive and communication skills. Three contact hours.

CHD 1382 Curriculum for Young Children III 3 cr.

Prerequisite: CHD 1381. This course is designed to provide a varied environment that invites exploration and experimentation. Offering a variety of activities and experiences that promote self-expression and interaction with children that encourage self-esteem, social development, and creativity along with parent involvement. Three contact hours.

CHD 1710 Child Growth and Development II 3 cr.

Prerequisite: CHD 1220. This course focuses on the young differently-abled child, children in crisis, working with families, behavior management, nutrition, health and safety in the early childhood classroom. The course includes Modules II and III of the HRS Child Care Worker Training Course. This course is useful for CDA (Child Development Associate) documentation. Three contact hours.

CHD 2120 Infant and Toddler Care II (Education) 3 cr.

Prerequisite: CHD 1110. This course introduces infant and toddler care workers to educational strategies for children from birth to three years. The course also covers minimum standards, classroom management, teacher preparation, assessment, discipline and parent participation. This course is useful for CDA (Child Development Associate) documentation. Three contact hours.

CHI — Chinese

CHI 1000 Conversational Chinese (Y) 3 cr.

This course concentrates on the development of oral and conversational skills in the language. Communicative habits and cultural patterns that influence everyday conversation will be included. Visual and auditory aids will be used; students are expected to work independently in the language lab and with audio tapes. This course is designed for everyday use of the language; it will not fulfill the general education foreign language requirements of the State University System. Three contact hours (unsupervised lab work).

CHI 1120 Beginning Chinese I (Y) 4 cr.

This beginning course consists of the fundamentals of Chinese speech and grammar taught by integrating the basic communication skills of hearing and understanding, speaking, reading and writing. Five contact hours: four lecture, one laboratory (unsupervised).

CHI 1121 Beginning Chinese II (Y) 4 cr.

Prerequisite: CHI 1120. This course is a continuation of Beginning Chinese I. Five contact hours: four lecture, one laboratory (unsupervised).

CHM — Chemistry

CHM 1020 Chemistry for Liberal Arts (Y) 3 cr.

Students will benefit by taking high school algebra or MAT 0024 prior to enrolling in this course. This course, designed to meet the General Education Requirements for non-science majors, is designed especially for students who wish to gain an understanding of the fundamental nature of physical science from the chemical point of view. The treatment utilizes an approach to scientific concepts and methods, stressing and illustrating principles rather than merely listing phenomena. Three contact hours.

CHM 1025C Introduction to General Chemistry (Y) 4 cr.

Corequisite: MAC 1102 or satisfactory score on placement test. This course is an introduction to the concepts of inorganic chemistry including structures of matter, atomic theory, nomenclature, bonding, gases, solutions, equilibrium, and acids and bases. This course is for students who have had no previous chemistry and plan to major in science, engineering, pre-medicine or pharmacy. Six contact hours: four lecture/discussion hours, two laboratory hours.

CHM 1032C Principles of General Chemistry (Y) 4 cr.

Corequisite: MAT 0025 or satisfactory score on the placement test. Students will benefit by taking high school algebra or MAT 0025 prior to enrolling in this course. This course is an introduction to the concepts of inorganic chemistry including structures of matter, atomic theory, nomenclature, bonding, bases and introduction to organic chemistry. This course is for students who have had no previous chemistry and plan to major in dental hygiene, medical technology, nursing or health related fields. Six contact hours: four lecture/discussion hours, two laboratory hours.

CHM 2045C General Chemistry and Qualitative Analysis I (Y) 4 cr.

Prerequisites: MAC 1102 and CHM 1025C or satisfactory score on the chemistry placement test. This course, designed to introduce students to modern chemical concepts, includes modern atomic structure and periodicity, chemical bonding, states of matter, gas laws and solutions. The laboratory work will be quantitative in nature, stressing accurate laboratory techniques. This course meets the first year college requirements for those majoring in science, engineering, pre-medicine or pharmacy. Six contact hours: three lecture hours, three laboratory hours. (CBE)

CHM 2046C General Chemistry and Qualitative Analysis II (Y) 4 cr.

Prerequisite: grade of "C" or better in CHM 2045C. This course, a continuation of General Chemistry and Qualitative Analysis I, stresses chemical equilibrium, chemical kinetics, electrochemistry, oxidation-reduction and selected families of metals and non-metals. Laboratory work includes studies of ionic equilibrium in aqueous solutions and semi-micro qualitative analysis. Six contact hours: three lecture hours, three laboratory hours.

CHM 2205C Introductory Organic/Biochemistry (Y) 4 cr.

Prerequisite: CHM 1032C. This course is an introduction to organic chemistry of functional groups and a survey of the biochemistry of proteins, carbohydrates, lipids and nucleic acids. Six contact hours: three lecture hours, three laboratory hours.

CHM 2210C Organic Chemistry I (Y) 4 cr.

Prerequisite: CHM 2046C or equivalent. This course emphasizes the general principles and theories of organic chemistry with emphasis on classification, nomenclature, methods of preparation, characteristic reactions, stereochemistry and structure determination of organic compounds. Six contact hours: three lecture hours, three laboratory hours.

CHM 2211C Organic Chemistry II (Y) 4 cr.

Prerequisite: CHM 2210C. This course, a continuation of Organic Chemistry I includes mechanisms of organic reactions, carbohydrates and macromolecules. Six contact hours: three lecture hours, three laboratory hours.

CHM 2930 Selected Topics in Chemistry (Y) 3 cr.

Prerequisite: instructor approval. The open format of this course provides an opportunity to address various selected topics related to the chemistry sciences. This course may be repeated for credit. Three contact hours.

CIS — Computer and Information Systems

CIS 2300 Command-Level CICS Programming (Y) 3 cr.

Prerequisites: COP 2120 and COP 2540. This course provides training in Customer Information Control Systems (CICS), a general purpose database and data communication interface between an operating system and application programs. Students will design, code, test and debug programs in COBOL for real time applications. Four contact hours: three lecture hours, one laboratory hour.

CIS 2321 Information Systems (Y) 3 cr.

Prerequisite: COP 2540, CGS 2542 or COP 2700. This course, designed to introduce students to the fundamental concepts of information systems, focuses on the study, analysis and design phases of the system development life cycle. Emphasis is on current system documentation techniques through the use of both classical and high level fourth generation software tools/techniques for describing process flows, data flows, data structures, file design, input and output designs, and program specifications. Four contact hours: three lecture hours, one laboratory hour.

CIS 2401 User Support and Software Evaluation (Y) 3 cr.

Prerequisite: CGS 1060 or CGS 1570. This course will present a host of skills critical to the success of an integrated systems or end user support specialist. They will include evaluating software and hardware, resolving computer security issues, developing disaster preparedness plans, writing RFPs, networking non-computer hardware,

integrating telephone systems, voice mail systems and reprographic systems, and ergonomics. Four contact hours: three lecture hours, one laboratory hour.

CIS 2410 Midrange Operations and Management (Y) 3 cr.

Prerequisites: COP 2700 and CDA 2502. This is a capstone course designed to provide students with advanced features of a midrange computer system and the associated concepts and principles. Emphasis is on the IBM AS/400 platform. Sample topics include disaster and recovery, communications, journalizing and commitment, and object management concepts. Four contact hours: three lecture hours, one laboratory hour.

CIS 2930 Combined Topics In CIS (Y) 3 cr.

Prerequisite: depends on topic. Corequisite: depends on topic. The open-topic format of this course provides an opportunity to address various combinations of topics related to CIS curriculum or DP industry need. This course may be repeated for credit. Four contact hours: three lecture hours, one laboratory hour.

CJD — Criminal Justice Development

CJD 2310 Police Supervision 3 cr.

This introductory course, designed to acquaint future and present police supervisors with an understanding of the various functions of supervision, examines the supervisor's responsibilities and assignments. The general topical areas include techniques of working with people, communications, personnel selection and training, motivation, principles of organization and management, disciplinary methods and performance ratings. Three contact hours.

CJT — Criminal Justice Technology

CJT 2100 Fundamentals of Criminal Investigation (Y) 3 cr.

Criminal investigation covers general investigative principles and techniques used by law enforcement. This fundamental course in the most important phases of criminal investigation deals with the following branches of crime including methods of investigation, note taking, report writing, handling the crime scene, interrogations, admissions and confessions, missing persons, undercover assignments and such specific offenses as arson, narcotics, larceny, burglary, robbery and forgery. Three contact hours.

CJT 2801 Introduction to Private Security 3 cr.

This course is a study of history, nature and role of private security, including; education and training, combating internal threats, information security, risk management, physical security, emergency management, legal issues, and security management. Three contact hours.

COP — Computer Programming

COP 1000 Introduction to Programming and Algorithm Design (Y) 3 cr.

Prerequisite: MAT 0025 with a grade of "C" or better or satisfactory score on the mathematics placement test. This is an essential first course for data processing majors. It will

introduce the fundamentals of computer usage, covering topics such as editor functions, files (batch and interactive) and program compilation and execution. Students will be taught algorithm design using structured flow chart and pseudo-coding techniques. The programming language Pascal will be introduced and used throughout the course to supplement the theoretical foundations that are being built. Four contact hours: three lecture hours, one laboratory hour.

COP 2120 COBOL Programming (Y) 3 cr.

Prerequisites: CGS 1060 and COP 1000. COBOL (Common Business Oriented Language) is the programming language specifically designed to solve business problems. Students will solve elementary to moderately complex business problems by writing COBOL programs, submitting programs for compilation and running on the College's computer system and thoroughly debugging programs until the output is perfect. Four contact hours: three lecture hours, one laboratory hour. (CBE)

COP 2121 Advanced COBOL Programming 3 cr.

Prerequisite: COP 2120 or equivalent experience. COBOL (Common Business Oriented Language) is the programming language designed to solve business problems. Students will solve moderately complex business problems by writing COBOL programs, submitting programs for compilation and running on the College's computer system and thoroughly debugging programs until the output is perfect. Four contact hours: three lecture hours, one laboratory hour. (CBE)

COP 2160 RPG Programming — AS/400 3 cr.

Prerequisites: COP 1000 and CGS 1062. Students will write, compile and run RPG programs that deal with program-defined and externally-defined files and combinations thereof. They will create source programs using the Source Entry Utility (SEU) and create data definitions through Data Definition Utility (DSS and IDDU). Appropriate command language (CL) will be emphasized. Students will write a series of programs using various combinations of RPG coding specification forms for a variety of applications including random file updating. The processing method for this course will be primarily batch. Four contact hours: three lecture hours, one laboratory hour.

COP 2162 Advanced RPG Programming — AS/400 3 cr.

Prerequisite: COP 2160. This course is a continuation of RPG Programming AS/400. In this course, students will learn to work with program-defined files and external files, including full procedure files. Concepts will be presented on how to update indexed sequential files in various formats randomly and sequentially utilizing file and subfile processing techniques. Students will learn how to design display screens using Screen Design Aid and using the structured programming instruction set. Program development and data description techniques will be emphasized. Four contact hours: three lecture hours, one laboratory hour.

COP 2200 FORTRAN Programming (Y) 3 cr.

Prerequisite: MAT 0025 with a grade of "C" or better or satisfactory score on the mathematics placement test (Engineering Technology students may substitute CET 1461). This comprehensive study of a scientific programming language, which is also used in business applications in batched job processing, environments emphasizes file manipulation, including disk, files and efficient programming techniques, interactive programming and simulation. Lab problems will include business, engineering and scientific applications. Four contact hours: three lecture hours, one laboratory hour.

COP 2220 Introduction to C Programming (Y) 3 cr.

Prerequisite: COP 1000. This course will instruct students in the fundamentals of C program development including algorithm design, program definition, coding, testing and debugging. Modularity will be learned, using programmer-defined functions. C is a highly portable language and is adaptable to different computers. Most popular microcomputer software packages are written in C. Students will develop C programs to solve real world problems. Four contact hours: three lecture hours, one laboratory hour.

COP 2332 Introduction to Windows Programming Using Visual Basic 4 cr.

Prerequisite: COP 1000. This is a first course in Windows programming. Visual Programming techniques are presented using the Microsoft Visual Basic programming language. Topics include event-driven programming concepts, Visual Basic data and logic structures, objects, properties, methods, subroutines, functions, and the visual basic design environment. Four contact hours: three lecture hours, one laboratory hour.

COP 2334 Object-Oriented Programming with C++ (Y) 3 cr.

Prerequisite: COP 2220. This course will provide students with a working knowledge of object-oriented programming using C++. It will review structures, functions with parameter passing and pointers. Projects, classes, inheritance and polymorphism will be covered with many examples. Students will develop programming projects to reinforce the concepts presented in class and for use in "real world" situations. Four contact hours: three lecture hours, one laboratory hour.

COP 2540 Data Management and Job Control Language 3 cr.

Prerequisite: COP 2120. This course covers data organization, access methods and job control language that are relevant to the mainframe environment. The use of utility programs as components of an application system to build and maintain files will also be covered. Topics will include an introduction to databases and database management systems. Four contact hours: three lecture hours, one laboratory hour.

COP 2612 Microcomputer Operating Systems Concepts 3 cr.

Prerequisite: CGS 1060, CGS 1570 or equivalent work experience. This course requires substantial lab time on

microcomputers to learn about and apply the operating system functions and commands that are valuable or necessary in a working environment. Students will review the basics of initializing diskettes and move on to programming language, copying, file management, backup and recovery, sort and other routines. Operating systems reviewed in this course are MS DOS and UNIX. Other topics include multi-user systems, data communications and establishing interfaces involving microcomputers, minicomputers and mainframes. Four contact hours: three lecture hours, one laboratory hour.

COP 2700 Database Concepts and Design — AS/400 cr.

Prerequisites: CGS 1062 and COP 2160. Basic design and coding methods required to implement a relational database in application programs using a midrange computer system are taught in this course. The main topics are directed toward those users who have responsibility for designing and creating relational databases on a mid-range computer system. Also included will be an examination of SQL as a facility for defining, manipulating and controlling data in a relational database. Four contact hours: three lecture hours, one laboratory hour.

COP 2701 Database Design and Programming for Microcomputers 4 cr.

Prerequisite: COP 1000, CGS 2542 or prior database experience. The objective of this course is to teach individuals to design and develop database applications and to write database programs in a fourth generation dBASE programming language. This language is embedded in several popular database products including FoxPro, dBASE IV, dbFAST, etc., and is the underlying language in many database packages running in the Windows and DOS operating systems environments. Four contact hours.

COP 2800 Object Oriented Programming with JAVA (Y) 4 cr.

Prerequisite: COP 1000. This course will provide students with an introduction to object oriented programming using the JAVA language. It will introduce the concept of object oriented programming and the basics of designing JAVA applets for the World Wide Web. The course includes JAVA data types, functions, structures and methods, as well as classes and inheritance. JAVA graphics methods and classes will also be explored. Students will develop programming projects to reinforce the concepts and gain hands-on experience with the language. Four contact hours: three lecture hours, one laboratory hour.

COT — Computing Theory**COT 1000 Data Processing Mathematics 3 cr.**

Prerequisites: COP 1000 and MAT 0025 with a grade of "C" or better or satisfactory score on mathematics placement test. This is a foundation course for computer and information system majors. Topics include binary, octal and hexadecimal numbers, fixed point storage and arithmetic, the real number system, approximations, accuracy and precision, scientific notation, floating point notation and storage, and

logical forms and operation. Computer laboratory exercises will be used to demonstrate the topics and techniques involved. Four contact hours: three lecture hours, one laboratory hour. (CBE)

CPO — Comparative Politics

CPO 2002 Introduction to Comparative Government (Y) 3 cr.

This course consists of a comparison of the institutions and the economic systems of capitalism and socialism associated with the political systems of specific countries. Three contact hours.

CRW — Creative Writing

CRW 2000 Imaginative Writing (Y) 3 cr.

Prerequisite: ENC 1102. This course develops students' capacity for imaginative writing in prose and/or poetry. The course includes critical discussion of students' work and of selected literary techniques and individual conferences. Three contact hours.

CTE — Clothing and Textiles

CTE 1300 Introduction to Clothing Construction 3 cr.

This course is designed for beginning sewers. Topics include selection of equipment, selection and use of a commercial pattern, selection care and use of sewing and pressing equipment, simple alterations, and developing very basic construction skills. Students will construct a simple pull-on elastic waist bottom and a simple pull-over top. Four contact hours: two lecture hours, two laboratory hours.

CTE 1310 Basic Clothing Construction (Y) 3 cr.

Prerequisite: CTE 1300. This course includes the selection and use of commercial patterns, pattern alterations, zipper and waistband application, collar application, set-in sleeves with cuffs, planning and construction of garments, and the development of basic construction skills. The course also includes the selection of suitable accessories. Four contact hours: two lecture hours, two laboratory hours.

CTE 1340 Advanced Clothing Construction (Y) 3 cr.

Prerequisite: CTE 1310. This course presents to participants the problems encountered in fitted garments construction. Students will exhibit skill in figure analysis, pattern alterations and advanced clothing construction techniques. Four contact hours: two lecture hours, two laboratory hours.

CTE 1350 Tailoring I 3 cr.

Prerequisite: CTE 1340 or equivalent. This course, designed for students who are interested in creating individual fashions which meet the students' special preferences and requirements, emphasizes an individualized approach to custom design, fit, advanced construction and tailoring techniques. Four contact hours: two lecture hours, two laboratory hours.

CTE 1401 Basic Textiles (Y) 3 cr.

This course, a study of fabrics used for clothing and home furnishings, emphasizes fibers, yarns, constructions, designs and finishes that determine qualities and the performance of a fabric. This course also includes the use and care of fabrics and cost factors. Four contact hours: two lecture hours, two laboratory hours.

CTE 1731 Fashion Illustration (Y) 3 cr.

This course is designed to provide students with the basic skills in sketching the fashion figure and apparel. Emphasis is placed on simple methods of drawing and coloring. Varied media and rendering techniques are explored. Four contact hours: two lecture hours, two laboratory hours.

CTE 1812 Retail Merchandising (Y) 3 cr.

This is a basic course designed to provide students with an overview of the retailing industry, including organization, operation, environmental influence on the industry, store location, layout and design, and entrepreneurship. Three contact hours.

CTE 1821 Merchandising Mathematics (Y) 3 cr.

This course is designed to provide students with an exploration of the financial management of retail stores in terms of dollar and unit figures. Study includes terms, pricing, turnover, shortages, gross margin, buying plan, stock-sales ratio, retail methods of inventory, expenses, profit and loss, and operating statements. Three contact hours.

CTE 1827 Retail Buying (Y) 3 cr.

Prerequisite: CTE 1812. This course is designed to provide students with an in-depth study of buying functions and techniques. Emphasis will be placed on determining consumer demand as well as planning, selection, controlling and evaluating purchases. Three contact hours.

CTE 1840 Merchandising Information 3 cr.

This course provides students with the ability to analyze quality of materials, construction and design of merchandise in all price ranges. Consumer demands and trends will also be studied. Three contact hours.

CTE 1856 Retail Salesmanship (Y) 3 cr.

This course provides students with an in-depth understanding of the personal selling process as it specifically relates to retail sales. Emphasis will be on successful personal selling techniques, multiple and suggestive selling, and personal service, as they relate to the merchandising of apparel, accessories, and home furnishings and accessories. Three contact hours.

CTE 2200 Wardrobe Planning and Updating (Y) 3 cr.

This course provides for the development of competency in planning individual and family wardrobes. Factors to consider in purchasing wardrobe items are stressed as well as the care, maintenance and updating of various wardrobe components. Emphasis will be placed on the psychological and social factors influencing dress and the relationship of physical appearance to clothing selection.

Attention will be given to the effectiveness of clothing choices in professional situations. The course includes experiences in the application of elements and principles of design to wardrobe coordination. Three contact hours.

CTE 2712 Designing for Special Needs (Y) 3 cr.

Prerequisite: CTE 1340. This course is designed to assist students in becoming aware of the emotional needs and physical limitations of special needs individuals and develop the competencies to design and fit garments to adapt to these needs and limitations. Four contact hours: two lecture hours, two laboratory hours.

CTE 2743 Pattern Drafting for Fashion Design (Y) 3 cr.

Corequisite or prerequisite: CTE 1340. This course is intended for students with prior experience in clothing construction who are interested in designing garments. Major concepts of the course include elements and principles of design and their application both to fashion and to designing and constructing a garment. Four contact hours: three lecture hours, one laboratory hour.

CTE 2751 Draping for Fashion Design (Y) 3 cr.

Prerequisites: CTE 1340 and CTE 2743. This course is intended for students with previous experience in clothing construction who are interested in designing garments using the draping method. This method is considered useful in that many design details can better be achieved through the draping of muslin on a dressform. Different principles and techniques involved in draping will be explained and used. Four contact hours: three lecture hours, one laboratory hour.

CTE 2831 Retail Computer Applications (Y) 3 cr.

This course is an examination of the advantages and techniques of computer use in retailing. Emphasis is placed on the applications of computer generated information as a management tool. Three contact hours.

CTE 2851 Sales Promotion (Y) 3 cr.

This course provides students with an in-depth study of the techniques and methods used for advertising and promotion. Study includes advertising, special events, publicity, fashion shows and personal selling. Emphasis is placed on cost and effectiveness of the various forms of promotion. Three contact hours.

CTE 2852 Visual Merchandising (Y) 3 cr.

This course is designed to provide students with technical and practical knowledge needed to create effective merchandise displays. While themes and techniques change regularly, students will learn basics and fundamentals that can be readily adapted to multiple situations. Practical experience in using various types of equipment is an integral part of this course. Three contact hours.

CTE 2853 Fashion Show Production 3 cr.

This course provides an in-depth view of the steps required and decisions necessary to produce a fashion show. Emphasis will be placed on the promotional impact

and effectiveness of fashion shows as well as the planning and actual production of a formal fashion show. Three contact hours.

CTE 2862 Store Planning and Design 3 cr.

This course provides students with an in-depth analysis of store location and layout factors. Analysis includes factors affecting all aspects of store operation, site selection, leasing considerations, interior space allocations, exterior features, fixturing, store ambience and lighting considerations. Three contact hours.

CTE 2880 Retail Merchandising Internship (Y) 7 cr.

Prerequisite: completion of all other program requirements. This course is a supervised on-the-job training program. Students will be required to work a minimum of 400 total hours for a minimum of 12 weeks in an approved retail business. This cooperative education experience will provide students the opportunity to practically apply knowledge gained in the prerequisite courses. On-site visitations will be made by the instructor to monitor students' progress and performance. Additionally, students will attend a two-hour on-campus seminar every other week, emphasizing employment skills. Thirty-three contact hours: one lecture hour, thirty-two hours on-the-job experience.

CTE 2891 Fashion Marketing Career Development 2 cr.

This course is designed to provide students with the practical skills to more effectively market themselves to potential employers in the fashion industry. Topics include career exploration in the fashion industry, resume writing, job interviewing, personal appearance, human relation skills, business ethics, professional association membership and portfolio development. Two contact hours.

CTE 2955 Fashion Marketing and Field Study Tours 3 cr.

Prerequisite: CTE 1812 or consent of professor. This course will tour firms representing various aspects of the fashion industry. Itineraries will include visits to designers, manufacturers, buying offices, retailers and promotion agencies. On-campus classes will be required before and after the tours. Costs for travel, lodging, food and admissions will be charged to enrolled students. Students may repeat for credit three times when the market site visited is different. Three contact hours.

DAA — Dance Activities

DAA 1200 Beginning Ballet Technique I (Y) 3 cr.

This beginning level ballet class is specifically designed for students with little or no previous ballet training. Primary focus is placed on the basic fundamentals of ballet technique, correct placement of the body, and comprehension of the vocabulary of ballet technical terms. Three contact hours.

DAA 1340 Folk Dance (Y) 1 cr.

This course consists of the exploration and enjoyment of the fundamental steps, positions and formations of the popular American and ethnic folk and round dances. Two contact hours (activity).

DAA 1380 Recreational Dance (Y) 1 cr.

This course consists of the introduction and practice of the basic dance skills for enjoyment and recreation. Course content includes round, folk, square, social and current dancing. Two contact hours (activity).

DAA 1500 Basic Jazz Technique (Y) 3 cr.

This class will provide the novice dancer the fundamentals of classic jazz dancing with an emphasis on musical theatre. In addition to learning such basic principles as proper body alignment, balance, and syncopation, an overview of the history of jazz dance will be provided. No dance experience is necessary for successful completion of the class. Three contact hours.

DAA 2000 Fundamentals of Dance Techniques (Y) 3 cr.

This introductory course is intended to train students in the basic techniques of the major genres of dance. The course provides background and history of each dance style balanced with a practical experience in the studio. Students also explore and develop specific exercises for physical alignment, self-awareness, coordination, strength, flexibility, and versatility. Three contact hours.

DAA 2160 Contemporary/Modern Dance Techniques and Composition I (Y) 3 cr.

This introductory studio course is intended to train students in beginning levels of technique in modern dance. Emphasis is placed on creative exploration of movement, and experimentation with the dynamics of movement. Development also includes readings, observation, and discussion. Students also explore and develop specific exercises for physical alignment, self-awareness, coordination, strength, flexibility, and versatility. Three contact hours.

DAA 2161 Contemporary/Modern Dance Techniques II (Y) 3 cr.

Prerequisite: DAA 2160 or consent of professor. This class is a continuation of Contemporary/Modern Dance Techniques I. Emphasis is on defining and expanding movement awareness through modern dance technique and improvisation. Students will continue to develop and refine technical and performance skills. An overview of the history of modern dance is included. Three contact hours.

DEH — Dental Hygiene**DEH 1001C Introduction to Clinical Procedures 3 cr.**

Corequisite: DEH 1002C. This course is designed to acquaint students with their role as dental hygienists. It provides the necessary instruction and supervised practice in the dental operatory environment. Topics include infection control, instrument sterilization, care of dental equipment, and basic skills development in procedures for delivering services for the oral exam and prophylaxis. Five contact hours: one lecture hour, four laboratory hours.

DEH 1002C Dental Hygiene Instrumentation 4 cr.

Corequisite: DEH 1001C. This course is designed to introduce dental hygiene students to the theory and practical skills necessary for the fundamentals of dental hygiene

instrumentation combined with clinical sessions that would require students to demonstrate proficiency in utilizing dental hygiene instruments. Skills are performed primarily on mannequins and peers. Six contact hours: two lecture hours, four laboratory hours.

DEH 1720 Preventive Dentistry 2 cr.

This course is designed for students to apply principles and perform clinical activities for the prevention of oral disease, including data collection, application of preventive agents and home care instruction. This is a combined course with clinical experience, classroom interaction and field experience to provide students with the methods and material for teaching dental health in the schools and clinic. Two contact hours.

DEH 1800C Clinical Dental Hygiene I 6 cr.

This course is a continuation of the Principles of Dental Hygiene. It is a didactic and clinical course composed of lectures, laboratory exercises and actual clinical experience on patients. The purpose of this course is to provide students with clinical hygiene practice for continuing refinement of technical skills and an opportunity to gain extensive experience in the areas of dental hygiene education. This course will also include CPR. Ten contact hours: two lecture hours, eight clinical hours.

DEH 1802C Clinical Dental Hygiene II 7 cr.

Prerequisite: DEH 1800C. This course, a continuation of the practical application of the competencies and skills acquired in Introduction to Clinical Procedures, Instrumentation, and Clinical Dental Hygiene I, devotes time to providing oral prophylaxis care for patients, who present varying classifications of prophylaxis needs. The course emphasizes the continuing refinement of the techniques and skills in performing an oral prophylaxis including Gracey Curets in root planning, periodontal and dental charting, radiographic techniques and interpretations, dietary analysis, and efficiency and care in the management of patients, including those with special needs. Thirteen contact hours: one lecture hours, twelve clinical hours.

DEH 2507C Dental Hygienists Expanded Duties 2 cr.

This course, designed to teach dental hygiene students expanded functions as permissible by the Florida State Dental Practice Act, will include new procedures as traditional expanded functions are ratified by the Department of Professional Regulations, Board of Dentistry (Chapter 21G-16). This course will also include manipulation of dental materials utilizing dental hygiene techniques. Three contact hours: one lecture hour, two laboratory hours.

DEH 2602 Periodontics 2 cr.

This course, designed to give students a detailed study of the factors involved in periodontal pathology and its etiology, reviews in detail the anatomy, physiology and histology of the periodontium. The course emphasizes diagnosis, prognosis and treatment of patients with periodontal involvement and management of patients returning for

maintenance care. The course also teaches procedures and techniques for soft tissue curettage, periodontal dressing placement and removal, and suture removal. Two contact hours.

DEH 2701 Community Dentistry 3 cr.

This course incorporates the principles, practices, methods and visual aids used in teaching preventive dentistry to the public. Field experiences in elementary schools, public health centers, nursing homes and centers for individuals with disabilities will be utilized. Four contact hours: two lecture hours; two field hours.

DEH 2804C Clinical Dental Hygiene III 7 cr.

Prerequisite: DEH 1802C. This course, a continuation of Clinical Dental Hygiene II, emphasizes the continuing refinement and increased efficiency of clinical skills including complete prophylaxis procedures, radiographs, tact and management of patients, individual responsibilities, achievement in responsibility toward the community, the profession and dentistry in general. Students should achieve an advanced level degree of proficiency. Thirteen contact hours: one lecture hours, twelve clinic hours.

DEH 2806C Clinical Dental Hygiene IV 8 cr.

This course is a continuation in refinement of practical application of the competencies and the proficiencies in skills learned in all the past clinical didactic courses. Emphasis is on speed and quality improvement and upon exposure to community dentistry participating in offices of general dentists, dental specialties and hospital dentistry. Students should achieve an exit level degree of proficiency. Fifteen contact hours: one lecture hour, fourteen clinic hours.

DEH 2830 Dental Hygiene Office Management 2 cr.

This course is designed for students to receive instruction and practice in dental office management theory and practice; with emphasis on the use of office equipment. Two contact hours.

DEP — Developmental Psychology

DEP 2004 Human Growth and Development (Y) 3 cr.

This course consists of the study of the development of the individual throughout the life cycle, including child, adolescent and adult patterns of behavior with attention to physical, intellectual, cognitive, personality and social development. Three contact hours. (CBE)

DEP 2102 Child Psychology (Y) 3 cr.

Prerequisite: PSY 1012. This course consists of a developmental study of children from birth to the adolescent years. The course stresses practical applications with their implications for the parent and teacher, as well as for the evolving individual. Three contact hours. (CBE)

DEP 2302 Adolescent Psychology (Y) 3 cr.

Prerequisite: PSY 1012. This course consists of the study of human development in the adolescent years with emphasis on development, relationships and culture. Three contact hours.

DEP 2401 Adult Psychology (Y) 3 cr.

This course examines the physical, social, intellectual and personal characteristics of the human being during early, middle and late adulthood. The course will investigate key events in adult life, such as marriage, choice of occupation, parenthood and retirement, along with other developmental tasks and stages. Three contact hours.

DES — Dental Support

DES 1021C Dental Anatomy 3 cr.

This course is a comprehensive study of the form and function of the teeth. Also included is the study of head and neck anatomy, nerve and blood supply to teeth and musculature of the face. Laboratory sessions will be coordinated to include the study of the human dentition, surrounding tissues and the skull. Four contact hours: two lecture hours, two laboratory hours.

DES 1030 Oral Histology and Embryology 1 cr.

This course provides a study of embryonic development and microscopic anatomy of the face and oral cavity, including the teeth, supporting structures, salivary glands, other surrounding structures and TMJ. One contact hour.

DES 1100C Dental Materials and Laboratory 2 cr.

This course is a series of lecture-demonstrations designed to acquaint dental assistant/dental hygiene students with the nomenclature, proper manipulation, and application of the materials used in the laboratory and clinical practice of dentistry. Three contact hours: one lecture hours, two laboratory hours.

DES 1220C Dental Radiology 3 cr.

This course is designed to teach the proper use of dental X-ray equipment, including radiation safety in the taking, processing and mounting of dental radiographs, both intra-oral and extra-oral. This course also includes evaluation techniques, identifying landmarks and deviations from the normal and the filing of dental radiographs. Four contact hours: two lecture hours, two laboratory hours.

DES 2042 Oral Pathology 2 cr.

This course gives students a detailed understanding and knowledge of the causes and mechanisms of oral disease, oral trauma and oral developmental anomalies. It relates this knowledge to the systematic physiology of the body. Two contact hours.

DES 2050 Pharmacology and Oral Medicine 2 cr.

This course gives students a detailed study of the principles, characteristics, actions, reactions and uses of anesthetics, drugs, medicaments and preparations used to prevent, control and treat diseases. Two contact hours.

DIE — Dietetic

DIE 1201 Clinical Nutrition, Phase II 3 cr.

Students will acquire knowledge and skills in applying the principles of dietary modifications for specific physiological disorders. The course is closely related to the practices of local hospitals and extended care facilities. Three contact hours.

DIE 1204 Clinical Nutrition, Phase I 3 cr.

Prerequisite: HUN 1201. This course includes a study of roles of the dietetic technician in providing nutrition care to patients. Mathematical calculations, medical terminology, laboratory tests, nutrition assessments, care plans, follow up and documentation in medical records used by dietetic technicians are included. Three contact hours.

DIE 2120 Supervision and Personnel Management for Dietetics 3 cr.

Prerequisites: DIE 1201 and FSS 1221. Students will analyze the dietetic and food service management practices for non-commercial health facilities. Students will examine staffing; personnel recruitment and development; food service organization and supervision; supervision in client nutrition services; leadership methods; personnel training and evaluation. Students will do group case studies, site visits and prepare personnel projects. Three contact hours.

DIE 2270 Clinical Nutrition, Practicum I Lab/Clinical 3 cr.

Prerequisite: DIE 1201. This course is a continuation of Clinical Nutrition Phase II, further developing counseling/interviewing skills related to the preparation of nutrition care plans in relation to life span and to certain disease states. Clinical activities in health care facilities support classroom studies. Related physiology is included. Eleven contact hours: one lecture hour, ten field experience hours.

DIE 2271 Clinical Nutrition, Practicum II Lab/Clinical 3 cr.

Prerequisite: DIE 2270. This course continues development of counseling/interviewing skills related to the preparation of nutrition care plans for additional disease states. Clinical activities in health care facilities support classroom studies. Related physiology is included. Eleven contact hours: one lecture hour, ten field experience hours.

ECO — Economics**ECO 2013 Principles of Economics I (Y)** 3 cr.

This course in macroeconomics presents the foundations of economic analysis, the theory of economic growth, development and stabilization, current economic issues and the monetary theory. Three contact hours. (CBE)

ECO 2023 Principles of Economics II (Y) 3 cr.

Prerequisite: ECO 2013 or consent of professor. This course in microeconomics is a continuation of Principles of Economics I and includes a study of the tools for economic analysis, the price theory of the market system, the theory of the firm, the theories of production and distribution, and international trade. Three contact hours. (CBE)

EDF — Education Foundations**EDF 1005 Introduction to Education (Y)** 3 cr.

This course is a comprehensive and realistic look at the nature of students and how they learn; the role of teachers, the teaching process, and teaching as a career; and schools as social and political institutions in our society. Some field experience required. Three contact hours.

EDF 2085 Teaching Diverse Populations (Y) 3 cr.

This course is designed to study multicultural education. Emphasis is on such dimensions of diversity as culture, ethnicity, race, language, social class, exceptionally, gender, age, and sexual orientation and their implications for educational policy, curriculum and methodology. Field experience is required. Three contact hours.

EDG — Education General**EDG 2940 Observing and Recording Child Behavior** 6 cr.

Prerequisites: CHD 1220 and EEC 1001. This course is designed for students to observe, record and analyze young children's behavior in pre-school settings. The course includes a two-hour seminar and eight hours of supervised weekly experiences in a variety of community child care facilities. This course is useful for CDA (Child Development Associate) documentation. Ten contact hours: two lecture hours, eight laboratory hours.

EDG 2941 Supervised Student Participation 6 cr.

Prerequisites: CHD 1220, CHD 1710, EDG 2940, EEC 1001, EEC 1200 and EEC 1202. This course is designed for students to apply acquired knowledge and skills through supervised work experiences in child care facilities. The course includes a two-hour seminar and eight hours supervised field experiences weekly. This course is useful for CDA (Child Development Associate) documentation. Ten contact hours: two lecture hours, eight laboratory hours.

EDP — Educational Psychology**EDP 2002 Educational Psychology (Y)** 3 cr.

Prerequisite: PSY 1012. This course presents the theoretical principles underlying successful classroom practices and assists students in translating that knowledge into classroom use. Three contact hours. (CBE)

EEC — Education: Early Childhood**EEC 1001 Introduction to Early Childhood Education** 3 cr.

This course introduces basic principles and practices involved in guiding the young child. The course includes history and objectives of early childhood programs, child care issues, center licensing standards, and classroom activity planning. The course includes Module I of the HRS child care worker training course and is useful for CDA (Child Development Associate) documentation. Three contact hours.

EEC 1200 Overview of Early Childhood Curriculum 3 cr.

Prerequisite: EEC 1001. This course acquaints students with basic principles and resources for music, art, language arts and social studies activities for the young child. The course includes planning and methodology for child care teachers in a day care setting. This course is useful for CDA (Child Development Associate) documentation. Three contact hours.

EEC 1202 Program Development in Early Childhood Education 3 cr.

Prerequisite: EEC 1001. This course acquaints students with basic principles and resources for health, safety, nutrition, mathematics, science and movement education activities for the young child. The course includes teacher planning and methodology. The course includes Module II of the HRS child care worker training course and is useful for CDA (Child Development Associate) documentation. Three contact hours.

EET — Electronic Engineering Technology

EET 1035 Fundamentals of DC/AC Electricity (Y) 3 cr.

Prerequisite: MAT 0025 or satisfactory score on placement test. Corequisite: MAC 1102. This is an introductory course in basic electricity intended for the engineering technology programs. It consists of the concepts, laws and definitions encountered in DC and AC electric circuits. Laboratory exercises are required. Four contact hours: three lecture hours, one laboratory hour. (CBE)

EET 1037 DC/AC Network Analysis 3 cr.

Prerequisites: EET 1035 and MAC 1102. Corequisite: MAC 1114. This course covers the network analysis techniques used in DC and AC circuits. The course is quantitative in nature and makes liberal use of algebra and trigonometry. It is assumed that students enrolling in this course have an understanding of the fundamentals of DC and AC electricity. The course includes instruction in BASIC and incorporates computer analysis techniques. Four contact hours: three lecture hours, one laboratory hour.

EET 1144 Solid-State Devices (Y) 3 cr.

Prerequisites: EET 1035 and MAC 1102. This course is an introduction to the solid-state devices and circuits encountered in present day electronic equipment. Devices covered include, but are not limited to, diodes, transistors, op-amps and thyristors. Four contact hours: three lecture hours, one laboratory hour. (CBE)

EET 2147 Solid-State Circuit Analysis (Y) 3 cr.

Prerequisites: EET 1037 and EET 1144. Mathematical and functional analysis of the solid-state circuits encountered in present day electronic equipment are the main concerns of this course. It also considers some design concepts including a section on printed circuit board design. Four contact hours: three lecture hours, one laboratory hour.

EET 2324 Communications Electronics 3 cr.

Prerequisites: EET 2147 and CET 1114. This introductory course in the specialized field of communications electronics includes the fundamental concepts of communications circuits and signal modulation. This course is intended for students who have already acquired a solid foundation in electricity and electronics and desire to specialize in communications electronics. Four contact hours: three lecture hours, one laboratory hour. (CBE)

EET 2940 Biomedical Practicum 4 cr.

Prerequisites: EET 2147, EST 2112 and EST 2436. This course is designed to provide students with the essential electronic troubleshooting and clinical skills necessary to function as competent biomedical equipment technicians in a hospital setting. The course will be conducted at various local hospitals and will consist of supervised device circuit analysis, troubleshooting training and on-the-job training with practicing BMETs. Eight contact hours: all laboratory.

EHD — Education: Hard of Hearing and Deaf

EHD 1000 Orientation to Deafness 3 cr.

This course is an introduction and orientation to the physical, psychological, educational, legal, and social aspects of deafness. The course will deal with the impact of deafness on the individual and family, as well as the social patterns of the deaf community and culture. It will also describe historical and changing attitudes toward the culture of the deaf. Three contact hours.

EHD 1400 Introduction to Interpreting 4 cr.

Prerequisites: SPA 1380 and SPA 1382. This course is an introduction to the basic theories, guidelines, principles and practices of interpreting, including the role of the interpreter, professional behavior and the ethics of interpreting. Environmental considerations of communication and interpreting will be discussed. The course also includes a practice component for the development of beginning interpreting skills and will parallel with the theoretical models. Four contact hours.

EHD 1402 Issues in Educational Interpreting 6 cr.

Prerequisite: EHD 1406. This course is designed to provide advanced level interpreter training students with an introduction to the sign systems and processes used in the public school K-12 and postsecondary educational settings. The role and ethics of the educational interpreter, technical and educational sign vocabulary, and use of transliteration and interpreting in varying situations will be the focus of the course. Advanced training in expressive and receptive interpreting skills and drill and practice will increase the speed and fluency of the interpreting process. Six contact hours.

EHD 1404 Interactive Transliterating 3 cr.

Prerequisite: EHD 1406. Corequisite: EHD 1407. This course is designed to provide skill development for expressive and receptive transliterating through drill, practice and role play activities. Students will practice from audio taped, video taped and live material and will learn the techniques of self-assessment through video taping. Three contact hours.

EHD 1406 Interactive Interpreting I 6 cr.

Prerequisite: EHD 1400. This course is a continuation of Introduction to Interpreting. This course reinforces skill development and the expressive and receptive skills of intermediate level of interpreting through drill, practice and role play activities. Students will practice from audio taped, video taped and live voice materials, and will learn the techniques of self-assessment through video taping. The course also

offers a practical component for the development of intermediate interpreting skills. Course practice materials will parallel the theoretical models. Six contact hours.

EHD 1407 Interactive Interpreting II 4 cr.

Prerequisite: EHD 1406. This course is a continuation of Interactive Interpreting I. This course provides advanced in-depth discussion and application of techniques and principles for specific interpreting situations and expanded concentration on advanced expressive and receptive manual communication skills. Students will use live models, video tapes and interaction with deaf community members to improve their expressive and receptive intermediate interpreting manual communication skills. Four contact hours.

EHD 1930 Special Topics in Interpreting 2 cr.

Prerequisite: EHD 1406. Corequisite: EHD 1942. This course is designed to be taken in conjunction with interpreting internship during the last semester of the program. Special topics, including business practices, professional conduct and the professional role of the interpreter during internship and employment will be the emphasis of the course. Student interpreters will have the opportunity to apply problem solving approaches to problems encountered during the internship. Two contact hours.

EHD 1941 Interpreting Practicum 2 cr.

Prerequisites: EHD 1404 and EHD 1406. This course provides intermediate and advanced interpreting students with an opportunity to observe the interpreting process in various professional work situations and to gain knowledge of community agencies and resources which serve the deaf community. Students will schedule regular observation hours and according to their level of interpreting skill assist agency staff in normal duties. Practicum experiences are to take place during school/work hours and require a minimum of two hours per week. Two contact hours.

EHD 1942 Interpreting Internship 4 cr.

Prerequisite: EHD 1941. Corequisite: EHD 1930. This course provides an opportunity for advanced level interpreting students to be assigned for one semester to agencies and organizations which serve deaf people. Internship placement will provide working experience, practical application of the theoretical role of professional service providers and an introduction to the duties and responsibilities of interpreters in the community. Four contact hours.

EHD 1945 Evaluation Preparation 1 cr.

Prerequisite: EHD 1941. This course is designed to assist students in refining skills in order to successfully pass the state assessment evaluation systems for interpreters. One contact hour.

EME — Education: Technology and Media

EME 2040 Introduction to Educational Technology (Y) 3 cr.

This course is an introduction to the classroom applications of educational technologies. The course includes a survey of educational hardware and software. Topics

include multimedia, interactive media, ethics and legal issues and the Internet. Four contact hours: three lecture hours, one laboratory hour.

EMS — Emergency Medical Services

EMS 1059 First Responders: Emergency Care Training 3 cr.

Designed specifically for non-medical individuals who wish to learn basic life saving skills, this course provides students with the basic skills necessary to save a life, minimize patient discomfort and prevent further injury. Upon successful completion of this course, students are qualified in basic life support and prepared to enter Fundamentals of Emergency Medical Care, as prerequisite skills are a part of the course content. This course may not be used as an elective by students entering the A.S. or paramedic certificate program. Three contact hours: two lecture hours, one laboratory hour.

EMS 1119 Fundamentals of Emergency Medical Care 6 cr.

Prerequisite: EMS 1059 or consent of professor. Corequisite: EMS 1401. This course, designed to prepare individuals for initial employment as EMTs, includes current techniques practiced by a first-level EMT providing emergency medical care. On successful completion of this course and the corequisite EMS 1401, students are qualified to take the State Registry Examination for EMT Level I. Six contact hours.

EMS 1401 Fundamentals of Emergency Medical Care Clinical Experience 4 cr.

Prerequisite: EMS 1059 or comparable medical experience. Corequisite: EMS 1119. This course consists of demonstrations of emergency procedures for life-threatening problems which will be practiced in the College laboratory. Clinical rotation in a local hospital emergency care facility is a requirement for this class. Eight contact hours: four laboratory hours, one and one-half clinical hours, two and one-half rescue field experience hours.

EMS 2271 EMT-Paramedic Phase I 6 cr.

Prerequisites: EMS 1119, EMS 1401, BSC 2085C, BSC 2086C and MAT 0024 or satisfactory score on placement test. Corequisite: EMS 2271L. The first of a three-term sequence of instruction for the EMT-paramedic. EMT, human systems and patient assessment, shock and fluid therapy, respiratory system and management of emotional crisis are studied. Six contact hours.

EMS 2271L EMT-Paramedic Phase I Lab/Clinical 6 cr.

Prerequisites: EMS 1119, EMS 1401, BSC 2085C and MAT 0024 or placement into MAT 0025 based on placement test. Corequisites: EMS 2271 and BSC 2086C. The clinical program consists of a three-term sequence. This clinical segment includes an emergency room and psychiatric in-hospital rotation. Laboratory and clinical application of experience are a continuation of EMT-Paramedic Phase I. Fourteen contact hours: four laboratory hours, six clinical hours, four rescue field experience hours.

EMS 2272 EMT-Paramedic Phase II 6 cr.

Prerequisites: EMS 2271, EMS 2271L and BSC 2086C. Corequisite: EMS 2272L. This course is a continuation of EMT-Paramedic Phase I. The unit of study includes modules addressing the cardiovascular system, general pharmacology, the central nervous system and OB/GYN emergencies. Six contact hours.

EMS 2272L EMT-Paramedic Phase II Lab/Clinical 6 cr.

Prerequisites: EMS 2271 and EMS 2271L. Corequisite: EMS 2272. This course, a continuation of EMT-Paramedic Phase I, will include emergency room rotation and an intensive care and critical care in-hospital rotation. Fourteen contact hours: four laboratory hours, six clinical hours, four rescue hours.

EMS 2273 EMT-Paramedic Phase III 4 cr.

Prerequisites: EMS 2272 and EMS 2272L. Corequisite: EMS 2273L. The last part of the three-term sequences of EMT-paramedic instruction includes soft tissue injuries, musculoskeletal system, medical emergencies, psychological emergencies, pediatric and neonate transport, and management of emotional crisis. Four contact hours.

EMS 2273L EMT-Paramedic Phase III Lab/Clinical 8 cr.

Prerequisites: EMS 2272 and EMS 2272L. Corequisite: EMS 2273. The last part of the three-term sequence of clinical experiences requires riding a mobile intensive care unit and hospital rotation in a local surgical facility. Sixteen contact hours: two laboratory hours, fourteen clinical hours.

EMS 2311 Management of Emergency Medical Services 3 cr.

Prerequisites: EMS 2273 and EMS 2273L. This course is designed to prepare managers in the EMS profession. Topics include leadership and administrative skills, legal issues, budgeting and personnel management. Three contact hours.

EMS 2761 Emergency Medical Services Education 3 cr.

Prerequisites: EMS 2273 and EMS 2273L. This course is an application of education theories and practices in the emergency medical service profession. Three contact hours.

ENC — English Composition**ENC 0001 Introduction to Composition A (College preparatory studies course) 4 cr.**

(This course does not apply toward the associate's degree.) Prerequisite: satisfactory score on placement test. This course is an introductory course in composition designed to help students gain greater proficiency in basic writing skills. The course assesses the level at which students are writing to discover individual areas of deficiency in writing skills and provides the necessary instruction to help them overcome these deficiencies. As a result of carefully planned learning experiences, students should be able to write

clear, adequately-developed, logically-organized, effective sentences which conform to the conventions of standard American English. This is a college preparatory course and does not apply toward the associate's degree. Four contact hours.

ENC 0021 Introduction to Composition B (College preparatory studies course) 4 cr.

(This course does not apply toward the associate's degree.)

Prerequisite: ENC 0001 with a grade of "C" or better or satisfactory score on placement test. This course is an introductory course in composition designed to help students gain greater proficiency in basic writing skills. The course assesses the level at which students are writing to discover individual areas of deficiency in writing skills and provides the necessary instruction to help them overcome these deficiencies. As a result of carefully planned learning experiences, students should be able to write clear, adequately-developed, logically-organized, effective paragraphs which conform to the conventions of standard American English. This is a college preparatory course and does not apply toward the associate's degree. Four contact hours.

ENC 1101 English Composition I (Y) 3 cr.

Prerequisite: satisfactory score on reading and writing placement tests. This course embodies the fundamentals of effective expression with emphasis on the various forms of expository writing, logical and imaginative thinking, and reading for understanding. The course provides instruction in sentence structure, diction, organization of short essays and correct usage of standard American English. This course includes CLAST writing competencies and serves to meet the Gordon Rule writing requirement. Three contact hours. (CBE)

ENC 1102 English Composition II (Y) 3 cr.

Prerequisite: ENC 1101 with a grade of "C" or better. As a continuation of English Composition I, this course includes the study and practice in research writing and writing competencies. This course covers CLAST writing competencies and serves to meet the Gordon Rule writing requirement. Three contact hours.

ENC 1132 Introduction to Critical Writing (Y) 3 cr.

Prerequisite: ENC 1101 with a grade of "C" or better. As additional preparation for argumentation and research, this course sharpens students' critical thinking skills and improves their ability to compose analytical, interpretive and evaluative essays in response to selected reading assignments. This course is designed for students who have successfully completed ENC 1101 but seek additional preparation for ENC 1102. Successful completers of ENC 1102 should not enroll in this course. Three contact hours.

ENC 2103 CLAST Review: Reading, Essay and English Language Skills (Y) 1 cr.

Prerequisites: ENC 1101, ENC 1102 and REA 1105 (if required). This course is designed for students who desire a brief, comprehensive review of the essential communications skills including reading, writing and grammar. It is

recommended for students who are preparing for the CLAST, students who are retaking CLAST and students who are seeking a refresher course in communications skills. One contact hour.

ENC 2105 CLAST Review: English Language Skills and Essay (Y) 1 cr.

Prerequisites: ENC 1101 and ENC 1102. This course is designed for students who desire a brief, comprehensive review of the essential communication skills including essay writing and grammar. It is recommended for students who are preparing for the CLAST, for students who are retaking CLAST, and for students who are seeking a refresher course in communication skills. One contact hour.

ENC 2210 Technical Report Writing (Y) 3 cr.

Prerequisite: ENC 1101 with a grade of "C" or better. This is a communications course giving primary emphasis to writing for the professions. The course stresses the use of factual information in descriptive, analytical and researched recommendation reports. The course also provides instruction in writing effective and timely letters, memoranda and informational reports, developing graphs and illustrations, and presenting oral reports. Three contact hours. (CBE)

ENC 2301 Advanced Writing (Y) 3 cr.

Prerequisite: ENC 1102 or ENC 2210. This course is designed to help perfect writing skills developed in freshman composition and to prepare students for sustained writing. Emphasis will be on clarity and elegance (without ostentation) of style. Close readings of samples of good, sophisticated writing will provide the basis for discussion of style and rhetorical principles. Three contact hours.

ENL — English Literature

ENL 2012 English Literature to 1750 (Y) 3 cr.

Prerequisite: ENC 1101 with a grade of "C" or better. This course introduces the main literary traditions from Beowulf through the Restoration and the 18th century. It provides a study of the most characteristic writings of these periods. This course serves to meet the Gordon Rule writing requirement. Three contact hours. (CBE)

ENL 2022 English Literature Since 1750 (Y) 3 cr.

Prerequisite: ENC 1101 with a grade of "C" or better. This course introduces the main literary traditions from the Romantic and Victorian periods to the present. It provides a study of the best and most characteristic writings of these periods. This course serves to meet the Gordon Rule writing requirement. Three contact hours. (CBE)

ENS — English as a Second Language (for Non-Native Speakers)

ENS 1201 ESL Speech — Level II (Y) 3 cr.

Prerequisite: listening placement test score at Level II or successful completion of ESL college-prep series. Corequisites: ENS 1221, ENS 1241, ENS 1261 and ENS 1281. This course will give students practice in the appropriate usage of idioms and expressions and phonetic patterns in spoken English. Students will practice both listening comprehension and conversational patterns through individual

and group presentations. Students will engage in individual laboratory practice, group exercises, short lectures and conversations which will enhance their speaking and listening vocabularies, grammatical speech patterns and oral comprehension. Strong emphasis will be placed on phonological theory and practice. Three contact hours.

ENS 1221 ESL Reading — Level II (Y) 3 cr.

Prerequisite: reading placement test score at Level II or successful completion of ESL 0121. Corequisites: ENS 1201, ENS 1241, ENS 1261 and ENS 1281. This course gives students practice in gaining increased vocabulary as well as reading speed and comprehension at both the literal and inferential levels. Reading activities include skimming for main ideas, scanned and speed reading. It will also place emphasis on techniques of vocabulary development as well as techniques identifying basic forms of paragraph development. It will include activities which encourage students to further develop their oral and written proficiency in English. Three contact hours.

ENS 1241 ESL Writing — Level II (Y) 3 cr.

Prerequisite: writing sample at Level II or successful completion of ESL 0141. Corequisites: ENS 1201, ENS 1221, ENS 1261 and ENS 1281. This course gives students practice in writing unified, coherent paragraphs. Students will learn how to develop and write specific types of paragraphs, such as process, explanation, comparison/contrast, and cause/effect. In addition students will practice using correct grammatical structures, punctuation and spelling. Three contact hours.

ENS 1261 ESL Structure — Level II (Y) 3 cr.

Prerequisite: structure placement test score at Level II or successful completion of ESL 0161. Corequisites: ENS 1201, ENS 1221, ENS 1241 and ENS 1281. This course gives students the opportunity to develop skill in the use of English grammar in basic patterns involving interrogative, declarative and exclamatory sentences. It emphasizes verb tenses, irregular parts of speech and other features of grammar. Activities will involve oral and written exercises in sentence transformation/combination, communicative interaction, and controlled writing. Three contact hours.

ENS 1281 ESL Combined Skills — Level II (Y) 3 cr.

Prerequisite: placement test scores at Level II or successful completion of ESL college-prep series. Corequisites: ENS 1201, ENS 1221, ENS 1241 and ENS 1261. The purpose of the combined skills course is to focus on the integration of the communication skills taught in ENS 1201, ENS 1221, ENS 1241 and ENS 1261. Students will participate in learning activities which promote spontaneous use of language in oral and written form. Students will develop personal strategies for analyzing and correcting their pronunciation, listening, speaking and writing problems. Through their carefully structured tasks, teachers will systematically analyze and correct student errors in ways to promote personal growth and increased proficiency. The materials used to integrate the skills in this course will promote appreciation of the students' own cultures as well as the understanding of American values and customs. Three contact hours.

ENS 1301 ESL Speech — Level III (Y) 3 cr.

Prerequisite: listening placement test score at Level III or successful completion of ENS 1201. Corequisites: ENS 1321, ENS 1341, ENS 1361 and ENS 1381. This course stresses the practice of the principles and methods involved in oral/aural communications. Students will engage in purposeful and sometimes guided discussions on a variety of topics. In addition, students will be given the opportunities to practice listening and notetaking skills through video taped authentic lectures by FCCJ professors. Individual laboratory practice in pronunciation, stress, intonation and listening skills for academic purposes is an integral part of this course. Three contact hours.

ENS 1321 ESL Reading — Level III (Y) 3 cr.

Prerequisite: reading placement test score at Level III or successful completion of ENS 1221. Corequisites: ENS 1301, ENS 1341, ENS 1361 and ENS 1381. Students learn to read materials that will increase their vocabulary, develop their critical thinking skills, improve their understanding of American culture and prepare them for entrance into mainstream courses. The readings will not only instruct students in comprehension techniques but also will give instruction in various aspects of American culture. Various library exercises will introduce students to the campus library and teach them how to use the resources. Three contact hours.

ENS 1341 ESL Writing — Level III (Y) 3 cr.

Prerequisite: writing sample at Level III or successful completion of ENS 1241. Corequisites: ENS 1301, ENS 1321, ENS 1361 and ENS 1381. This course is designed to refine students' writing skills. Students learn the step-by-step process method of paragraph and essay writing with an emphasis on four-paragraph essays. The use of correct grammatical form, mechanics and punctuations is emphasized. Students will practice writing essays in different organizational patterns throughout the semester. Three contact hours.

ENS 1361 ESL Structure — Level III (Y) 3 cr.

Prerequisite: writing sample at Level III or successful completion of ENS 1261. Corequisites: ENS 1301, ENS 1321, ENS 1341 and ENS 1381. This course is designed to provide review and reinforcement of basic English structures. It includes certain grammatical features of high frequency in English. Students will review verb tenses and be able to perform written and oral transformations of complex English structure patterns. The desired outcome is for students to improve their performance in all skill areas. Three contact hours.

ENS 1381 ESL Combined Skills — Level III (Y) 3 cr.

Prerequisite: placement test scores at Level III or successful completion of ENS 1200 series. Corequisites: ENS 1301, ENS 1321, ENS 1341 and ENS 1361. The purpose of the combined skills course is to focus on the integration of the communication skills taught separately in ENS 1301, ENS 1321, ENS 1341 and ENS 1361. Students will participate in learning activities which promote spontaneous use of language in oral and written form. Students

will develop personal strategies for analyzing and correcting their pronunciation, listening, speaking and writing problems. Through their carefully structured tasks, teachers will systematically analyze and correct student errors in ways to promote personal growth and increased proficiency. The materials used to integrate the skills in this course will promote appreciation of the students' own cultures as well as the understanding of American values and customs. Three contact hours.

ESL — English as a Second Language — Preparatory**ESL 0101 ESL Speech — Level I 3 cr.
(College preparatory studies course)**

(This course does not apply toward the associate's degree.)

Prerequisite: listening placement test score at Level I. Corequisites: ESL 0121, ESL 0141, ESL 0161 and ESL 0181. This course stresses the fundamentals of speech for non-native speakers of English. It focuses on improving spoken English for increased intelligibility and also focuses on improving listening skills for greater understanding of spoken English. The course provides instruction in the production of speech sounds, stress, intonation and rhythm in spoken English. Three contact hours.

**ESL 0121 ESL Reading — Level I 3 cr.
(College preparatory studies course)**

(This course does not apply toward the associate's degree.)

Prerequisite: reading placement test score at Level I. Corequisites: ESL 0101, ESL 0141, ESL 0161 and ESL 0181. The purpose of the course is to instruct students in techniques for grasping sentence and paragraph meaning. Students will learn word meanings in context and will increase their vocabulary. They will develop skills in determining literal meaning with minimal use of their bilingual dictionaries. The course will focus on increasing reading comprehension. It will lead students through increasingly complex reading passages to help them progress from literal meanings toward critical reading and thinking. Further, it will provide opportunities, through reading, to understand important ideas and values in American life. Three contact hours.

**ESL 0141 ESL Writing — Level I 3 cr.
(College preparatory studies course)**

(This course does not apply toward the associate's degree.)

Prerequisite: writing sample at Level I. Corequisites: ESL 0101, ESL 0121, ESL 0161 and ESL 0181. The first half of the course will focus on controlled writing practice, beginning at the sentence level. Students will write short descriptions and narratives based on personal experience. This intensive writing practice serves to help establish a purpose for writing and give students confidence in their ability to do so. The second half of the course will introduce students to writing as a process. They will practice, individually and in groups, writing paragraphs that demonstrate their competency in using the process, the format and the standards of acceptable writing. Additional rhetorical modes may be introduced. Three contact hours.

ESL 0161 ESL Structure — Level I 3 cr.
(College preparatory studies course)

(This course does not apply toward the associate's degree.)
Prerequisite: structure placement test score at Level I. Corequisites: ESL 0101, ESL 0121, ESL 0141 and ESL 0181. The purpose of the course is to present in meaningful sequence the grammar of the English language with a view toward linking the systematic study of the grammar to language use in purposeful communication. Students will apply the grammar points learned to the listening, speaking and writing activities in the corequisite classes. Three contact hours.

ESL 0181 ESL Combined Skills — Level I 3 cr.
(College preparatory studies course)

(This course does not apply toward the associate's degree.)
Prerequisite: placement test score at Level I. Corequisites: ESL 0101, ESL 0121, ESL 0141 and ESL 0161. The purpose of the combined skills course is to focus on the integration of the communication skills taught in ESL 0101, ESL 0121, ESL 0141 and ESL 0161. Students will participate in learning activities which promote spontaneous use of language in oral and written form. Students will develop personal strategies for analyzing and correcting their pronunciation, listening, speaking and writing problems. Through their carefully structured tasks, teachers will systematically analyze and correct student errors in ways to promote personal growth and increased proficiency. The materials used to integrate the skills in this course will promote appreciation of the students' own cultures as well as an understanding of American customs and values. Three contact hours.

EST — Electronic Specialty Technology

EST 1412 Biomedical Technology and Techniques 3 cr.

Prerequisites: EET 1035 and BSC 2085C. This course, designed to introduce students to the hospital, biomedical equipment manufacturers and the contract maintenance organizations, emphasizes the organizational structure of the hospital and identifies the role of the BMET within this framework. The course will also introduce students to the literature in professional journals covering facets of the BMET's job with particular emphasis on instrument critiques, electrical safety standards and new products. Finally, the course will utilize a system approach in analyzing how technology is applied in the health-care setting, from the medical and administrative management viewpoints. Systems analyzed will include intensive care unit, cardiovascular diagnostic laboratory and operating rooms. Three contact hours.

EST 2112 Electrical-Electronic Control Systems 3 cr.

Prerequisites: EET 2147 and CET 1114. This course consists of the study of the operation and control of industrial equipment and processes including motors and the controlling systems involved in their operation and protection. Four contact hours: three lecture hours, one laboratory hour. (CBE)

EST 2436 Biomedical Instrumentation I 3 cr.

Prerequisites: CET 1114, EET 2147 and EST 1412. This course introduces students to the biomedical equipment used in patient vital signs measurement and monitoring, respiratory system measurement and monitoring, and the clinical environment in which these devices are used. Students will learn external operating characteristics of devices as well as internal circuitry. Students will utilize these concepts in verifying device performance, in performing necessary calibration and in learning preventive and corrective maintenance techniques. Four contact hours: two lecture hours, two laboratory hours.

EST 2438 Biomedical Instrumentation II 3 cr.

Prerequisite: EST 2436. This course, a continuation of the study of biomedical instrumentation, introduces students to the remaining biomedical equipment of significance typically utilized in the health care setting, i.e. in the operating room, the labor and delivery room, radiology, nuclear medicine, radiation therapy and clinical laboratory. Students will learn the external operation of devices, their internal electronic circuitry and the clinical environment in which they are used. Students will utilize these concepts in the lab to verify device performance, to perform calibration and to learn preventive and corrective maintenance techniques. Four contact hours: two lecture hours, two laboratory hours.

EST 2603 Robotics 3 cr.

Prerequisites: CET 2123, EST 2112 and ETG 2502. This course covers the fundamentals of operation, construction, repair and servicing of robots from the technician's point of view. Along with the prerequisite courses, it prepares technicians to install and maintain robots and other related automated industrial equipment. Hands-on exercises with trainer robots in the areas of assembly, troubleshooting and programming are required for all students. Four contact hours: three lecture hours, one laboratory hour.

ETC — Engineering Technology: Civil

ETC 2220 Soils and Foundations 3 cr.

Prerequisite: ETG 2530. This course covers the criteria used in the selection, design and construction of the elements of a structure that transfers its total load to the underlying formations. Theoretical aspects considered and treated are analysis of subsoil conditions, bearing capacity and settlement analysis, character of natural soil deposits, earth pressure and retaining wall theory, and stability of slopes and subgrades. This course also covers the basic types of prevalent foundations, their design and behavior characteristics. Four contact hours: three lecture hours, one laboratory hour.

ETC 2450 Concrete 3 cr.

Prerequisite: ETI 1420. The course is a study of the fundamentals of concrete and its use as an engineering material. Topics included in the course are the design of concrete mixtures, use of admixtures, placement, special types of concrete and the field-laboratory procedures used to achieve quality control. The course consists of lectures and laboratory. Four contact hours: two lecture hours, two laboratory hours.

ETC 2500 Highway Drafting and Route Design 3 cr.

Prerequisite: CGS 2470. This course is concerned with the elements of a transportation roadway and their functions, the effects of traffic and functions, the effects of traffic and vehicular characteristics on road design, length of highway, curvature and elevation of roadbeds and earthwork computations applied to highway route design. Four contact hours: two lecture hours, two laboratory hours.

ETD — Engineering Technology: Drafting

ETD 1100 Engineering Drawing (Y) 3 cr.

This survey course consists of the principles and practices involved in making and reading engineering drawings with emphasis on lettering, industrial symbolism, orthographic projection and multiview representation. This course also includes instruction and practice in descriptive geometry. Five contact hours: two and one-half lecture hours, two and one-half laboratory hours. (CBE)

ETD 2350 CAD — Advanced 3 cr.

Prerequisite: CGS 2470. The course presents 3D drawings and AutoLISP concepts for increasing drawing/design productivity. The basics of AutoLISP, development of files, functions, and applications of advanced techniques are presented. Five contact hours: two lecture hours, three laboratory hours.

ETD 2536 CAD — Mechanical Electrical 3 cr.

Prerequisite: CGS 2470. The course deals with the use of AutoCAD and/or similar software for mechanical-electrical drawing and design applications. The emphasis in the course is on the use of computer graphics for the preparation of mechanical-electrical drawings. Commercial as well as industrial structures are included. Five contact hours: two lecture hours, three laboratory hours.

ETD 2538 CAD — Architectural 3 cr.

Prerequisites: TAR 2120 and CGS 2470. This course covers the use of AutoCAD and/or similar software for architectural design and plan preparation. Emphasis in the course is on developing an understanding of AutoCAD and architectural software and applying this understanding to architectural practice. Residential as well as commercial applications are presented. Five contact hours: two lecture hours, three laboratory hours.

ETD 2542 Structural Drafting 3 cr.

Prerequisite: TAR 2120. This course is a study of the required steel and concrete plans for building and the preparation of the shop details from those plans. Given the structural design of a building, students will prepare both the structural plan and the shop details necessary for the fabrication of the structural members. Four contact hours: two lecture hours, two laboratory hours.

ETD 2548 CAD — Civil 3 cr.

Prerequisite: CGS 2470. This course deals with the use of AutoCAD and similar software for the preparation of engineering drawings as they relate to site planning, land development and other civil engineering drawings. Emphasis in the course is on developing an understanding of

computer graphics software and applying this understanding in the preparation of engineering drawings. Five contact hours: two lecture hours, three laboratory hours.

ETG — Engineering Technology: General

ETG 2502 Engineering Mechanics (Y) 3 cr.

Prerequisite: MAC 1114. This course is an introduction to the basic laws of mechanics and includes a study of force, motion, moments, couples, static equilibrium, centroids, friction, work and energy. The laboratory portion of the course will emphasize the practical aspects of the above topics and will include exercises in measurements, drive systems, linkages, support members, etc. Four contact hours: three lecture hours, one laboratory hour. (CBE)

ETG 2530 Testing and Strength of Materials (Y) 3 cr.

Prerequisites: ETG 2502 and ETI 1420. This course is a study of the basic concepts involved in determining the resistance of engineering materials of various loads with emphasis on the applied use of various formulae for a systematic analysis. The laboratory portion of the course involves actual stress testing with stress testing equipment. Four contact hours: three lecture hours, one laboratory hour.

ETI — Engineering Technology: Industrial

ETI 1420 Engineering Materials and Processes (Y) 3 cr.

This course is a study of the leading materials used in engineering and building construction. It examines the materials in terms of their properties, forming processes and applications. Three contact hours.

ETI 1700 Occupational Safety (Y) 3 cr.

This course imparts the knowledge essential to safe practices in industry. Included in the course are an examination of current industrial safety management methods and the major provisions of the Occupational Safety and Health Act. Three contact hours. (CBE)

ETI 2781 Industrial Supervision (Y) 3 cr.

The purpose of this course is to prepare students for a role in the world of work as they assume responsibilities leading toward supervisory positions and management. Three contact hours. (CBE)

ETM — Engineering Technology: Mechanical

ETM 1700 Air Conditioning Fundamentals 3 cr.

Corequisite: MAC 1140. This course covers the basic principles of air conditioning technology including heat pumps. The basic underlying theory and principles are presented. They include fluids and pressures, pressure-enthalpy relationships, heat transfer, psychrometrics and the relationships between air properties and comfort. Various technical options currently available in terms of system components and design are introduced. Three contact hours.

ETM 2310 Fluid Mechanics 3 cr.

Prerequisites: MAC 1114 and ETI 1420. This course deals with fluid properties, fluid statics, buoyancy and stability, flow of fluids in pipes and open channels, flow measurement and forces due to fluids in motion. Four contact hours: three lecture hours, one laboratory hour. (CBE)

EUH — European History

EUH 1000 Western Civilization Through 1589 (Y) 3 cr.

This course consists of a survey of the cultural beginnings of civilization and the diffusion and accumulation of culture through the Reformation. Three contact hours. (CBE)

EUH 1001 Western Civilization From 1589 to the Present (Y) 3 cr.

This course in modern western institutions from 1715 to the present day includes the development of modern Europe to the present. The course includes reading and writing competencies. This course serves to meet the Gordon Rule writing requirement. Three contact hours. (CBE)

FAD — Home Economics: Family Development

FAD 1230 Family Dynamics 3 cr.

This course studies the interpersonal relationship of personal and family problems including analysis of the basic elements involved in courtship, mate selection, engagement, marriage, parenthood and child development. It also covers topics such as acceptable standards of social behavior, personal appearance, social customs, personality development, human relations and consideration of the various occupational opportunities within the broad field of family, and consumer technology. Three contact hours.

FFP — Fire Fighting and Protection

FFP 1000 Introduction to Fire Protection (Y) 3 cr.

This course is a study of the philosophical and historical backgrounds of fire protection services including the role and responsibilities of the fire service, the organization and function of federal, state, county and private fire protection agencies, a review of municipal fire defenses, fire prevention principles, techniques of fire control, codes and ordinances, the problems of the fire administrator and a survey of professional fire protection career opportunities. Three contact hours. (CBE)

FFP 1100 Fire Service Organization 3 cr.

This course presents the principles of organization and administration in fire protection service, a study of company personnel management and training, fire equipment, communications, maintenance, budgeting, records and reports, insurance rating systems and public relations. Three contact hours.

FFP 1110 Fire Company Supervision and Management 3 cr.

This course, a review of the structure and functions of a fire company as a component of a municipal organization, stresses the duties and responsibilities of the company officer, including planning, training, records and reports, and employee supervision. Three contact hours.

FFP 1200 Fundamentals of Fire Prevention 3 cr.

The course presents the structure and function of the fire prevention organization including the interpretation and application code regulations, a study of the procedures and

techniques of fire prevention, including inspection, surveying and mapping, recognition and elimination of fire hazards, the problems of public relations and the coordination with other governmental agencies. Three contact hours.

FFP 1315 Fire Codes and Standards 3 cr.

In this course students will learn to identify and describe the design deficiencies that are responsible for the spread of fire, heat and smoke in the buildings. They will be able to explain the effects and results of fire protection when incorporated in building construction. Three contact hours.

FFP 1620 Private Fire Protection Systems 3 cr.

This course is a study of private fire and detection systems including fixed extinguishing systems and standard and/or special fire alarms. It also includes a review of the design, installation, maintenance and testing of the systems. Three contact hours.

FFP 2150 Fire Service Instructor 3 cr.

This course is designed for students seeking the State Fire Company Officer I Certification. Students will learn the purpose and types of training necessary in fire department operations. In addition, selection criteria for instructors and utilization of training equipment will be presented. Three contact hours. (CBE)

FFP 2210 Fire Investigation 3 cr.

This course presents the principles of fire investigation including methods of determining area of fire origin, fire cause and fire spread, location and preservation of evidence, interrogation of witnesses, arson detection and arson laws, case preparation and court procedures, and reports and records. Three contact hours.

FFP 2300 Fire Codes and Building Construction 3 cr.

This course includes the study of federal, state and local laws applicable to the fire service, a survey of Fire Codes and Standards of the National Fire Protection Association and the Fire Prevention Code of the American Insurance Association, the role of the State Fire Marshal, and the principles and practices used in building construction. Three contact hours.

FFP 2326 Blueprints Reading and Plans 3 cr.

This course presents the structure and function of the fire prevention through the interpretation and application of blueprints. Using these codes, standards and inspection techniques learned previously, students will review building plans to find errors and omissions, make corrections according to code and identify where each item is located in the blueprints. Three contact hours.

FFP 2400 Fire Fighting Tactics and Strategy 3 cr.

This course covers the basic concepts involved in fire fighting, including fire behavior, size-up, attack principles, utilization of available manpower and equipment, and preplanning fire problems. Emphasis will be on developing thinking skills in relation to crises. Three contact hours.

FFP 2500 Hazardous Materials I 3 cr.

This course presents the basic fundamentals of chemistry used in fire science types of chemicals and processes, and laws at federal, state and local levels pertaining to use, storage and transportation of chemicals. Topics also covered include hazards of radioactives, precautions to observe in fighting fires involving hazardous materials and laboratory demonstrations of incompatibles. Three contact hours.

FFP 2501 Hazardous Materials II 3 cr.

Prerequisite: FFP 2500. This course is a continuation of Hazardous Materials I and is divided into two sections. The first section deals with why materials explode, why they are unstable and how they react with water, air and each other. The second section explores toxicity. Three contact hours.

FFP 2502 Introduction to Hazardous Materials/Waste Management 3 cr.

This course is an overview of the environmental impacts resulting from management of hazardous materials. Emphasis is placed on understanding the sources responsible for soil, water and air pollution. Three contact hours.

FFP 2515 Introduction to Environmental Law and Policies 3 cr.

This course introduces the current federal laws that regulate the assessment, use, handling, storage and disposal of hazardous materials. It includes: the Clean Air Act, Clean Water Act, RCRA Toxic Substance Control Act, Federal Pesticide Act, CERCLA, and SARA. Three contact hours.

FFP 2520 Sampling and Monitoring of Hazardous Conditions 3 cr.

This course teaches how to detect, monitor and measure hazardous conditions including flammability, oxygen deficiency, toxicity, and PH. Sampling, chain of custody, storage, preservation and transportation will be discussed. Three contact hours.

FFP 2522 OSHA Hazardous Waste Operation and Emergency Response 3 cr.

This course covers OSHA 29CFR1910.120 HAZWOPER Regulations. Successful completion of this course is required by the federal government before a worker may enter a hazardous waste site. Three contact hours.

FFP 2523 Hazard Site Analysis 3 cr.

This course teaches students to develop a safety plan and conduct operations around a hazardous waste site or an emergency chemical spill site. Maintaining OSHA compliance will be stressed. Three contact hours.

FFP 2524 Transportation of Hazardous Materials 3 cr.

This course explores regulations involving the transportation of hazardous materials and waste. It includes manifests, generator and transporter standards, DOT hazard classes, placards, labels, markings and spill response. Three contact hours.

FFP 2526 Oil Pollution Prevention and Response 3 cr.

This course explores the Oil Pollution Act of 1990. Topics include prevention, contingency planning, Mutual Act Agreements, liability, and oil spill cleanup. Three contact hours.

FFP 2600 Fire Fighting Equipment and Apparatus 3 cr.

This course covers the principles of pumping, construction and operation of pumps and pumping accessories, driving and pumping practices, principles and operation of aerial ladders, hydraulic systems, water supply, troubleshooting and related subjects. The course also includes the principles of the care, maintenance and operation of fire department vehicles. Subjects covered include theory of internal combustion engines, power development and transmission, torque and horsepower, electrical and brake systems, carburetion, engine tune-up and troubleshooting, characteristics of fuels and lubricants and other related principles of automotive vehicles. Three contact hours.

FIL — Film

FIL 1000 The Movies as Art (Y) 3 cr.

Prerequisite: ENC 1101 or satisfactory score on placement test. This general survey course examines the development of the motion picture as a universal art form, its historical and international background, theme and subject selection and script development, technological equipment and innovations, elements of visual composition, sound and music, acting and directing, and film criticism and analysis. This course examines the motion picture as a universal expression of man's varied cultures and creative expressions. This course includes reading and writing competencies. Four contact hours (lecture/viewing).

FIL 1100 Introduction to Screen Writing (Y) 3 cr.

Prerequisite: ENC 1101. This course includes writing scripts for television and motion pictures and how to effectively market them. Students will learn techniques to guide them from the germination of an idea to the revision of the final draft. Genres studied include episodic television, long-form television, and motion pictures, with concentration on characters, dialogue, structure, and visualization. Three contact hours.

FIL 1200 Introduction to Film Production (Y) 3 cr.

This introductory course in film production will introduce students to the principles of single-camera story telling using 16mm film as the medium of expression. Students will learn basic filming and editing techniques, as well as the fundamentals of assisting on major 35mm feature productions. Six contact hours: three lecture hours, three laboratory hours.

FIL 1250 Film and Video Post-Production (Y) 3 cr.

Prerequisite: FIL 1200. This course provides an introduction to the fundamentals of editing digital video, 16mm motion picture film, multitrack audio, and other audio and visual elements, including both cel (film) and computer animation, into a finished product. Techniques are learned on both linear video and film editors and on non-linear computer-based editing systems. Six contact hours: two lecture hours, four laboratory hours.

FIN — Finance

FIN 2000 Principles of Finance (Y) 3 cr.

This course consists of the study of investment characteristics of stocks and bonds, the securities market, introduction to securities analysis, commercial banks, the federal reserve system, inflation, deflation and money supply, and the history and nature of money and financial management. Three contact hours.

FIN 2100 Personal Finance (Y) 3 cr.

This course is a study of economic and personal goals including personal budgeting, credit buying, borrowing money, banking facilities, the nature of investments, life insurance, casualty insurance, medical insurance, home ownership, stocks and bonds, and retirement plans. Three contact hours.

FOS — Food Science

FOS 1201 Sanitation and Safety Management 3 cr.

Students will explore the scientific rationale for sanitation and safety practices which are enforced for group protection in institutions and food service facilities. Students will identify causative agents of food-borne illnesses and demonstrate preventive techniques by adhering to sanitation standards. The course emphasizes methods of accident and fire prevention. Three contact hours. (CBE)

FRE — French Language

FRE 1000 Conversational French (Y) 3 cr.

This course concentrates on the development of oral and conversational skills in the language. Communicative habits and cultural patterns that influence everyday conversation will be included. Visual and auditory aids will be used; students are expected to work independently in the language lab and with audio tapes. This course is designed for everyday use of the language; it will not fulfill the general education foreign language requirements of the State University System. Three contact hours (unsupervised lab work).

FRE 1120 Beginning French I (Y) 4 cr.

This beginning course consists of the fundamentals of French speech and grammar taught by integrating the basic communication skills of hearing and understanding, speaking, reading and writing. Five contact hours: four lecture hours, one unsupervised laboratory hour. (CBE)

FRE 1121 Beginning French II (Y) 4 cr.

Prerequisite: FRE 1120 or equivalent. This course is a continuation of Beginning French I. Five contact hours: four lecture hours, one unsupervised laboratory hour. (CBE)

FRE 2200 Intermediate French I (Y) 3 cr.

Prerequisite: FRE 1121 or equivalent. This course includes reading from modern and classic French authors, grammar review and conversation. Four contact hours: three lecture hours, one unsupervised laboratory hour. (CBE)

FRE 2201 Intermediate French II (Y) 3 cr.

Prerequisite: FRE 2200. This course is a continuation of Intermediate French I. Four contact hours: three lecture hours, one unsupervised laboratory hour. (CBE)

FSS — Food Service Systems

FSS 1100 Menu and Marketing Management 3 cr.

Students will acquire knowledge and demonstrate skills in menu planning, costing and pricing menu items, and designing menu format. The course will utilize effective merchandising methods in food display, advertising and interior decorating and emphasizes positive public relations techniques. Three contact hours.

FSS 1120 Management of Food and Beverage Purchasing 3 cr.

Students will acquire the fundamentals involved in purchasing food and beverages in quantity. The course emphasizes standardizing, grading and estimating, selecting, receiving and storing foods and beverages, as well as the practical application in writing specifications and in developing purchasing techniques. Three contact hours.

FSS 1202 Food Production I 3 cr.

Students will acquire knowledge and skill in the preparation of food. Included are basic principles and techniques of food preparation, management of resources, use of recipes, use and care of equipment and evaluation of food products. The course emphasizes safety and sanitation practices. Eight contact hours: two lecture hours, six laboratory hours. (CBE)

FSS 1221 Food Production II 3 cr.

Prerequisite: FSS 1202. Students will focus on the knowledge and preparation of meats, poultry, seafood, as well as starches, fruits and vegetables. Students will utilize all dry and moist methods of cooking. Menu selection and balance will be studied. The course emphasizes safety and sanitation procedures. Students will operate kitchen equipment and tools. Eight contact hours: two lecture hours, six laboratory hours.

FSS 1240 American Regional Foods 3 cr.

Prerequisite: FSS 1221. Students will plan and prepare menus that demonstrate various American regional and modified service styles. They will utilize principles from Food Production II to plan and cost the menu, convert recipes, prepare a work schedule and a summary report. Eight contact hours: two lecture hours, six laboratory hours.

FSS 1242 International Foods 3 cr.

Prerequisite: FSS 1221. In this course students will study and practice a la carte menu preparation for fine dining room service. Students will study the classical/international menus of Europe and the Orient. Special focus will be given to place presentation, portion control and expediting. Eight contact hours: two lecture hours, six laboratory hours.

FSS 1246 Baking 3 cr.

Students will acquire knowledge of the composition and properties of baking ingredients. They will utilize the proper equipment and tools, and standardize recipes to prepare yeast breads, rolls, pastries and cakes in the food service laboratory. The instructor will evaluate the products prepared based on established food service standards. Eight contact hours: two lecture hours, six laboratory hours.

FSS 1247 Pastries and Desserts 3 cr.

Prerequisite: FSS 1246. In this advanced course in pastry and dessert production, students prepare the advanced products presented at fine hotels, restaurants or bake shops. These products include danish and puff pastry, fine cake preparation, cake decoration, petit fours sec and glace, soft desserts and ices. Students will be exposed to chocolate work and sugar work. Platter presentation will be practiced. Eight contact hours: two lecture hours, six laboratory hours.

FSS 1248 Garde-Manger 3 cr.

Students will acquire knowledge and demonstrate skills in the application of special garde-manger techniques used in ice and tallow sculpturing. The class will observe dexterity in the proper use of tools to produce dinner and ice sculptured showpieces. Eight contact hours: two lecture hours, six laboratory hours.

FSS 2284 Catering and Buffet Management 3 cr.

Prerequisites: HFT 1265 and FSS 1221. This course provides future managers with skills in catering and buffet operation functions. Students will discuss, plan and execute a variety of catering concepts which include marketing principles and contracts, food costs, preparation of menus, serving styles and dining area layouts. Eight contact hours: two lecture hours, six laboratory hours.

FSS 2300 Supervision and Personnel Management 3 cr.

Students will develop and demonstrate skills necessary to the managerial procedures and functions of a food service operation. The course emphasizes personnel selection, interviewing techniques, supervision, organization, and planning and evaluation. Three contact hours.

FSS 2501 Food and Beverage Control Management 3 cr.

This course presents the basic principles and procedures of effective food and beverage cost control, including food and beverage purchasing, receiving, issuing, calculation of standards, production and planning special control. Three contact hours.

FSS 2942 Culinary Management Internship I 3 cr.

Students will participate in work related experience in the food service industry. Student interns will demonstrate occupational preparation and work habits as prescribed from course theories and labs. Ten contact hours: one-half hour (one hour every other week) lecture, ten field experience hours.

FSS 2943 Culinary Management Internship II 3 cr.

Prerequisite: FSS 2942. Students will participate in a supervised internship at an advanced level. This internship will be designed to provide students with opportunities to enhance technical skills in a specific culinary area. Ten contact hours: one-half hour (one hour every other week) lecture, ten field experience hours.

GEA — Geography: Regional Areas**GEA 1000 World Geography (Y) 3 cr.**

This introductory course deals with humanity's relationship to the natural environment in the various climatic, regional and economic areas of the world and the interrelationships. Three contact hours.

GEA 2200 Geography of North America (Y) 3 cr.

The regional geography of North America, USA, Canada and Mexico examines the population distribution and physical landscape of North America with an emphasis on understanding important geographical aspects of these three modern countries. Three contact hours.

GEA 2270 Geography of Florida (Y) 3 cr.

This course is designed to study important geographical aspects of the state of Florida. This course is concerned with physical, historical, population, economic, political and future geography of this state within the United States. Three contact hours.

GEA 2400 Geography of Latin America (Y) 3 cr.

This course examines the physical, cultural, and historical geography of Latin America relating to contemporary patterns and issues such as population, economics and the environment. Three contact hours.

GEA 2630 Geography of the Middle East (Y) 3 cr.

This course deals with important geographical aspects of the Middle East. This course is concerned with physical, historical, population, economic, political and future geography of this region. Three contact hours.

GEB — General Business**GEB 1011 Introduction to Business (Y) 3 cr.**

This course is an introduction to business systems and procedures. The orderly presentation of the subject matter provides students with the framework for further study in the field or the background for practical application in business and industry. Three contact hours. (CBE)

GEO — Geography: Systematic**GEO 2074 Geography for Teachers (Y) 3 cr.**

Prerequisite: GEA 1000. This course upgrades, improves and updates content information for elementary and secondary geography teachers. Three contact hours.

GEO 2200 Physical Geography (Y) 3 cr.

This course is a survey of the physical environment relevant to studies in earth sciences and regional geography. The natural occurrences, distribution and interrelationships

of basic elements of the physical environment such as climates, meteorology and landforms are examined. Three contact hours.

GEO 2370 Conservation of Resources (Y) 3 cr.

This survey course of natural and human resources of the world places special emphasis on the United States with an intensive study of the wise use and wasteful exploitation of these resources. Three contact hours.

GEO 2420 Cultural Geography (Y) 3 cr.

This course studies the ways cultures vary from place to place. Emphasis is placed on spatial diffusion, human-environmental interaction, and cultural landscapes. Three contact hours.

GER — German and Germanic Languages

GER 1000 Conversational German (Y) 3 cr.

This course concentrates on the development of oral and conversational skills in the language. Communicative habits and cultural patterns that influence everyday conversation will be included. Visual and auditory aids will be used. Students are expected to work independently in the language lab and with audio tapes. This course is designed for everyday use of the language; it will not fulfill the general education foreign language requirements of the State University System. Three contact hours (unsupervised lab work).

GER 1120 Beginning German I (Y) 4 cr.

This beginning course consists of the fundamentals of German speech and grammar taught by integrating the basic communication skills of hearing and understanding, speaking, reading and writing. Five contact hours: four lecture hours, one unsupervised laboratory hour. (CBE)

GER 1121 Beginning German II (Y) 4 cr.

Prerequisite: GER 1120 or equivalent. This course is a continuation of Beginning German I. Five contact hours: four lecture hours, one unsupervised laboratory hour. (CBE)

GER 2200 Intermediate German I (Y) 3 cr.

Prerequisite: GER 1121. This course is a thorough review of the principles of grammar. This review will be integrated with compositions and conversation planned to develop a basic active vocabulary and facility in communicating in written and spoken German. Four contact hours: three lecture hours, one laboratory hour. (CBE)

GER 2201 Intermediate German II (Y) 3 cr.

Prerequisite: GER 2200. This course is a continuation of Intermediate German I. Four contact hours: three lecture hours, one laboratory hour. (CBE)

GLY — Geology

GLY 1001 Earth and Space Science (Y) 3 cr.

This course acquaints students with the development of science, the integrating principles and theories in the earth sciences, the practice of the scientific method and with a useful knowledge of selected areas of geology, astronomy

and meteorology. Presentation involves lectures, demonstrations and films. The course is for general education and is not designed essentially as an introductory or preparatory course for any of the specific sciences. Three contact hours.

GLY 1001L Earth and Space Science Laboratory (Y) 1 cr.

Prerequisite/Corequisite: GLY 1001. This is a lab course designed to supplement GLY 1001. Students will learn to identify rocks and minerals, interpret geologic maps and explore the concepts of oceanography, earth dynamics and astronomy. Two contact hours (laboratory).

GLY 1010 Physical Geology (Y) 3 cr.

Corequisite: GLY 1010L. Physical Geology for majors and non-majors is the study of the earth. This course covers structure and land forms, modifying agents and processes, characteristic rocks and minerals and a brief study of the surrounding atmosphere and the earth as a planet. Three contact hours. (CBE)

GLY 1010L Physical Geology Laboratory (Y) 1 cr.

Corequisite: GLY 1010. This course includes laboratory activities designed to supplement GLY 1010. Students will study rocks and minerals, earth history, fossils, structural features of the earth and various earth forms as related to certain geologic processes with the aid of rock and mineral samples, topographic maps and aerial photographs. Two contact hours (laboratory).

GRA — Graphic Arts

GRA 1500 Theory of Printing Processes (Y) 5 cr.

Recommended corequisite: GRA 1502. This lecture course is designed to give an introduction to major processes of the printing industry. Career possibilities within printing and related industries are examined. Organizational relationships within a printing firm as well as working relationships between the vendor and buyer. Included in the course are all methods of typesetting, mechanical art preparation, quality control methods, printer's math and proofreading. Five contact hours. (CBE)

GRA 1502 Printing Processes — Laboratory 4 cr.

Recommended corequisite: GRA 1500. This laboratory course, designed to be an introduction to and experience in the basic skills of three of the major processes of the printing industry, emphasizing basic design techniques, computer typesetting and mechanical art preparation. Also introduced are darkroom and proofing techniques. Eight contact hours (theory/laboratory). (CBE)

GRA 1503 Theory of Lithographic Processes 5 cr.

Recommended corequisite: GRA 1504. This lecture course, designed to give an introduction to several of the major processes of the lithographic industry, includes process camera operation including line and halftone photography, negative stripping, platemaking and offset press operation. Also introduced are paper and ink manufacture and characteristics. Five contact hours. (CBE)

GRA 1504 Lithographic Processes Laboratory 4 cr.

Recommended corequisite: GRA 1503. This laboratory course, designed to give an introduction to and experience in the basic skills of several of the major processes of the lithographic industry, includes process camera operation including line and halftone photography, negative stripping and platemaking, various proofing processes, offset press operation and related bindery functions. Eight contact hours (theory/laboratory). (CBE)

GRA 1530 Typography: History and Terminology (Y) 3 cr.

Prerequisite: GRA 1504. This introductory course will cover type in relationship to its history, classification, measurement, nomenclature and terminology. Students will develop an understanding of the application of typography as it relates to visual communication. Four contact hours: three lecture hours, one laboratory hour.

GRA 1531 Typography and Design I (Y) 3 cr.

Prerequisites: GRA 1530, GRA 1543 and GRA 1821. This studio course's purpose is to provide graphic design students with a basic understanding of typographic form and communication. Students will gain an understanding of the design process and the use of typography in visual communication through an examination of type forms and their relationship to spatial organization and content. Four contact hours: three lecture, one laboratory hour.

GRA 1540 Layout and Design (Y) 3 cr.

This course teaches the technique of preparing layouts to be used for customer approval. Exploration of the creative process, visual appeal, basic design techniques and various targeting strategies are pursued. Students will be exposed to the various stages of the design process including thumbnail sketches, layouts, comprehensives and final art. Students will work with computers as well as the traditional tools of the art room. Three contact hours. (CBE)

GRA 1543 Principles of Graphic Design (Y) 3 cr.

Recommended prerequisite: ART 1300C. This introductory level studio course is an in-depth study of graphic design fundamentals and terminology. The course will stress the problem-solving process used by the graphic designer and discuss the profession of graphic design and visual communication. Students will develop proficiency in the knowledge and application of the elements of design including color, line, texture, and shape as well as the principles including contrast, balance, form relationships in space and repetition. Four contact hours: three lecture hours, one laboratory hour.

GRA 1544 Graphic Design I 3 cr.

Prerequisites: GRA 1531, GRA 1801 and GRA 2577. This studio course applies graphic design concepts through a series of projects for single and multipage layouts in two-dimensional space. Students will build on skills learned in prerequisite courses and will select appropriate media either traditional, electronic or a combination of both for

problem solving. The profession of graphic design will be emphasized through lectures, field trips and the language of visual communication. Four contact hours: three lecture hours, one laboratory hour.

GRA 1545 Graphic Design II (Y) 3 cr.

Prerequisite: GRA 1544. This intermediate level studio course extends the communication issues covered by the projects in the previous prerequisite course for single and multipage design to include both two and three dimensional media. This course will emphasize problem solving for various media. Also students will cover the language and profession of graphic design through lectures and field trip. Four contact hours: three lecture hours, one laboratory hour.

GRA 1546 Graphic Design III (Y) 3 cr.

Prerequisite: GRA 1545. This advanced level studio course is an in-depth exploration of two- and three-dimensional media and the potential creative use of contemporary technology in visual communication. This course includes experimentation in multipage print projects, computer animation, multi-media and environmental signage. The course will include lecture and field trips. Four contact hours: three lecture hours, one laboratory hour.

GRA 1800 Introduction to Computer Graphics 3 cr.

Recommended prerequisites: GRA 1502 or GRA 1504. This course is designed to familiarize graphic design and graphic art students with the basic hardware and software components of the Macintosh computer system for electronic publishing. Students will be familiarized with commercial graphic design and printing issues as applied to a computerized publishing system. Four contact hours: three lecture hours, one laboratory hour.

GRA 1801 Computer Illustration and Design 3 cr.

Prerequisite: GRA 1800 or equivalent experience. This course is designed to give graphic design and graphic art students an introduction to computer illustration using an object oriented drawing application. The course will enable students to create technical drawings, logotypes, business graphics, and art for other media. Software used is Adobe Illustrator. Four contact hours: three lecture hours, one laboratory hour.

GRA 1821 Desktop Publishing for Graphic Design 3 cr.

Prerequisite: GRA 1800 or Macintosh experience. This course is designed to give graphic design and graphic arts students an understanding of desktop publishing using a page layout application. Students will import text and graphics from other programs and sources (e.g., scanned images and object oriented draw programs) and work with color trapping and separation. Students will demonstrate knowledge of vocabulary appropriate to desktop publishing. Software used is QuarkXpress. Four contact hours: three lecture hours, one laboratory hour.

GRA 2508 Color Theory (Y) 3 cr.

Recommended prerequisite: GRA 1530. This course covers the study of major color theories, physical properties

of color, psychological aspects of color perception, and color communication and symbolism in graphic design. The practical aspects of color reproduction in printing and electronic media are covered through discussions and projects. Four contact hours: three laboratory hours, one laboratory hour.

GRA 2571 Camera Operation and Film Processing **3 cr.**

Prerequisite: GRA 1504. Corequisite: GRA 1540. This course presents the technique of operating the process camera for the reproduction of line and halftone copy negatives, contact printing, preparation of darkroom chemicals, and developing graphic arts films and papers. Safety and quality issues are stressed as well as inventory control and production management. Six contact hours (theory/laboratory). (CBE)

GRA 2573 Advanced Camera Operation and Film Processing **5 cr.**

Prerequisite: GRA 2571. This advanced course provides for skill development in the technique of operating the process camera for the reproduction of line and halftone copy negatives, contact printing, preparation of darkroom chemicals, and developing graphic arts films and papers. The course emphasizes the application of basic techniques toward greater job complexity, increased quality and increased productivity. Safety and management issues are addressed. Ten contact hours (theory/laboratory). (CBE)

GRA 2577 Electronic Imaging I **3 cr.**

Prerequisite: GRA 1800 or equivalent experience. This course is designed to give graphic design and graphic art students an introduction to pixel based editing using an image processing application. Students, upon completion of the course, will be able to provide post production for pre-press, color separation and halftones. Software used is Adobe Photoshop. Four contact hours: three lecture hours, one laboratory hour.

GRA 2578 Electronic Imaging II **3 cr.**

Prerequisite: GRA 2577. In this course graphic design and graphic art students gain an in-depth understanding of digital pre-press and computer color theory using an image processing application. This should enable students to produce digital grayscale and color images. Software used is Adobe Photoshop. Four contact hours: three lecture hours, one laboratory hour.

GRA 2601 Negative Stripping and Offset Platemaking **3 cr.**

Prerequisite: GRA 1504. Corequisite: GRA 1540. This course teaches the basic techniques for stripping up offset negatives and positives for proper press position, separating for color, and for exposing and developing offset press plates. Areas addressed include multiple exposures, pin register and various quality control elements including various proofing techniques. Six contact hours (theory/laboratory). (CBE)

GRA 2602 Advanced Negative Stripping and Offset Platemaking **5 cr.**

Prerequisite: GRA 2601. This advanced course provides for skill development in the technique of stripping up offset negatives and positives for proper press position, separating for color, and exposing and developing offset press plates. Knock out/drop-ins, multiple exposure and multiple color stripping techniques are explored as well as various proofing techniques. This course emphasizes the application of basic techniques toward greater job complexity, increased quality and increased productivity. Ten contact hours (laboratory). (CBE)

GRA 2635 Offset Press Operation **3 cr.**

Prerequisite: GRA 1504. Corequisite: GRA 1540. This course teaches the basic technique of setting up, operating, and maintaining duplicators and off-set presses in the 10x15, 11x17 and 14x20 inch ranges. Production management and cost saving strategies are explored. Quality control techniques are taught. Six contact hours (theory/laboratory). (CBE)

GRA 2638 Advanced Offset Press Operation **5 cr.**

Prerequisite: GRA 2635. This advanced laboratory course provides for skill development in the technique of setting up, operating, and maintaining duplicators and offset presses in the 10x15, 11x17 and 14x20 inch ranges. This course emphasizes multiple color printing, quality control issues and communication skills between press operator and client. This course emphasizes the application of basic techniques toward greater job complexity, increased quality and increased productivity. Ten contact hours (theory/laboratory). (CBE)

GRA 2740 Producing Multimedia (Y) **3 cr.**

Prerequisite: CGS 2525 or permission of instructor. This course covers the following topics: the past, present and future of multimedia, software/hardware requirements, fundamentals of design for screens and applications, multimedia elements and development of authoring tools. A major emphasis of the course is the creation of well-designed and executed multimedia modules. Four contact hours: three lecture hours, one laboratory hour.

GRA 2841 Web Page Design for the Internet **3 cr.**

Prerequisites: GRA 1800 or equivalent experience and GRA 2577 or equivalent experience. This course provides an introduction to web browsers (Netscape) basic web-page design software (Pagemill and Homepage) and simple HTML code. Participants will learn techniques on creating effective Web presentations, and Internet planning and marketing strategies. Students will learn how to "hang" and maintain their own web sites. These topics will be customized to the technical level of the participants. Four contact hours; three lecture hours, one laboratory hour.

GRA 2905 Directed Independent Study for Graphic Arts **2 cr.**

This course should be taken by students nearing completion of the printing program. A community related project that will utilize most of the skills acquired through the printing/graphic arts areas will be assigned and directed

by the instructor and the “end user” of the printed project. Two contact hours.

GRA 2945 Practicum 6 cr.

This course provides experience in the business/industrial setting under actual production standards. Eighteen contact hours (practicum). (CBE)

HBR— Modern Hebrew Language

HBR 1000 Conversational Hebrew (Y) 3 cr.

This course concentrates on the development of oral and conversational skills in the language. Communicative habits and cultural patterns that influence everyday conversation will be included. Visual and auditory aids will be used. Students are expected to work independently in the language lab and with audio tapes. This course is designed for everyday use of the language; it will not fulfill the general education foreign language requirements of the State University System. Three contact hours (unsupervised lab work.)

HFT — Hotel and Restaurant

HFT 1000 Introduction to Hospitality Management 3 cr.

This course is an overview of the hospitality industry which is composed of lodging, food and beverage, transportation, retail outlets, and special events. The management of hotels, motels, restaurants, kitchens, travel agencies, theme parks, casinos, and country clubs are introduced. This orientation course presents the history, organization, opportunities and challenges that exist in the many careers that make up the dynamic world of hospitality management. Examples of selected topics include: pioneers and leaders in hotel, restaurant and culinary management; independent and chain hotels, restaurants franchising and management contracts, cultural diversity, ethics and quality service management. Three contact hours. (CBE)

HFT 1250 The Management of Hotel/Motel Operations 3 cr.

This course acquaints students with the operation of a hotel or motel including front office procedures in registering, accounting for and checking out guests, promotional and sales practices, housekeeping, interior decoration, purchase of furniture, carpeting, linens and supplies, maintenance and engineering of a practical nature, facilities specifications, purchasing and storage. Three contact hours. (CBE)

HFT 1265 Restaurant Management 3 cr.

This course examines the basic principles of dining room service and management; and applies those principles to the operation of the FCCJ public fine dining room, The Mallard Room. Topics include types of dining room service, dining room organization, quality service standards, dining room operations, beverage service and continuous dining room cost. Eight contact hours: two lecture hours, six laboratory hours.

HFT 1300 Hotel/Motel Housekeeping Management 3 cr.

This course will provide an overview of the fundamentals of housekeeping techniques and management. It describes functions, tools and practices for future housekeeping managers. Three contact hours.

HFT 1410 Front Office Management — Hotel/Motel 3 cr.

This course guides students through all the skills, including directing the activities and solving the complex problems, needed to properly manage the front office of a hotel/motel. The course also acquaints students with the operation of all the departments as they apply to their primary responsibility of selling rooms and serving guests. Three contact hours. (CBE)

HFT 1434 Club Operations Management 3 cr.

Prerequisites: HFT 1000 and FSS 2300. This course introduces students to the specialized field of club management. It presents club organization, characteristics of club members and committees, marketing of the club, food and beverage operations, managing the club house and recreational activities. This course presents the history, the opportunities and the future of club management. Three contact hours.

HFT 1503 Marketing and Sales Management 3 cr.

Prerequisite: HFT 1250. This course is designed to provide students with basic knowledge and practical experience which will enable them to develop strategic marketing plans for hotel/motel properties. Three contact hours.

HFT 1600 Hospitality Law 3 cr.

This course will provide an awareness of the rights and responsibilities that the law grants to or imposes upon hotel keepers. It also emphasizes the importance of satisfying legal obligations. Three contact hours.

HFT 2700 Tourism 3 cr.

Prerequisite: HFT 1000. This course consists of a study of tourism, which includes travel and the entire hospitality field: hotels, motels, resorts, restaurants, camping and all the supportive services for travelers and vacationers. This course develops an understanding of the travel modes and enables students to become knowledgeable and responsive to the developments and the economic approaches that are necessary for a travel manager. Three contact hours.

HFT 2750 Convention Operations Management 3 cr.

Prerequisites: HFT 1250 and HFT 1265. This course defines the convention and group business market. It describes the marketing and sales strategies to attract markets with specific needs and explains techniques to meet those needs as part of meeting and convention service. Three contact hours.

HFT 2941 Hospitality Internship I 3 cr.

Prerequisites: HFT 1250, FSS 1202 and FSS 2300. This course consists of on-the-job experience supplied by the hotel/motel restaurant industries. Job placement will be dependent upon the availability of participating hospitality institutions. The course consists of 10 hours per week of

on-the-job instruction accompanied by a one-hour seminar per week. Eleven contact hours: one lecture hour, ten field experience hours.

HFT 2942 Hospitality Internship II 3 cr.

Prerequisite: HFT 2941. This course, an extension of Hospitality Internship I, consists of on-the-job work experience supplied by the hotel, motel and restaurant industries. Students will concentrate on a specific area or function that is career-goal oriented. Job placement will be dependent upon availability of participating hospitality institutions. The course consists of 10 hours per week of on-the-job instruction accompanied by a one-hour seminar per week. Eleven contact hours: one lecture hour, ten field experience hours.

HIS — General History

HIS 1907 Honors Survey of History (Y) 3 cr.

Prerequisites: outstanding performance in AMH 2010 and AMH 2020 or EUH 1000 and EUH 1001 and recommendation by the department. This independent survey in one or more selected fields of history incorporates extensive research and in-depth readings as well as developing interest and skill in the preparation of historical analysis and presentation in anticipation of further studies at the upper division college level in history or related fields. Three contact hours.

HLP — Health, Leisure and Physical Education

HLP 1081 Health Analysis and Improvement (Y) 2 cr.

This course is designed to introduce the principles and concepts of exercise physiology, values of exercise and information about nutrition and stress management as they relate to optimal health and the lifelong process of wellness. It involves lectures, assessment of students' current health/fitness status, an individualized training program, a computerized diet analysis and an introduction to varied activities designed to improve the components of physical fitness. Two contact hours.

HSC — Health Science

HSC 1100 Health Education (Y) 3 cr.

This course consists of a study of health-related problems which are of major importance to our society with emphasis on the study and examination of drugs, tobacco, alcohol, sex and on general principles involved in our present understanding of health-related areas. Three contact hours. (CBE)

HSC 1531 Medical Terminology (for Health Professions) (Y) 3 cr.

This course is designed to provide a basic working knowledge of medical terminology and medical abbreviations for students entering the health fields. The course will cover word analysis of the terminology for the various body systems and selected specialties, spelling of common medical terms and pronunciation of common medical terms. Three contact hours. (CBE)

HSC 2400 Standard First Aid and CPR (Y) 3 cr.

This course meets the needs of individuals who have an opportunity to give first aid care, whether in their daily routine or special activities. Upon successful completion of the course, students earn the National Safety Council Certification. Three contact hours.

HUM — Humanities

HUM 2021 Humanities Forum (Y) 3 cr.

Prerequisite: ENC 1101 or satisfactory score on the placement test. This course is a general introduction to western humanities emphasizing the study of values as expressed in the philosophies and arts of particular historical epochs. The epochs treated may vary from year to year. This course includes reading and writing competencies. Three contact hours.

HUM 2211 Humanities: The Foundations (Y) 3 cr.

Prerequisite: ENC 1101 or satisfactory score on the placement test. This course consists of the study of life and creative expressions from their origins in early cultures of the Mediterranean regions through medieval Europe as surveyed through the visual arts, music, literature, philosophy and social history. The course examines the interaction of cultural experiences that developed and were passed on to later peoples. This course provides a basic foundation for study of all humanities courses and includes reading and writing competencies. Three contact hours.

HUM 2236 Humanities: Mainstreams of Cultures, 15th to 20th Century (Y) 3 cr.

Prerequisite: ENC 1101 or satisfactory score on the placement test. This course consists of the study of life and creative expressions in Europe from the Medieval/Renaissance period to the 20th century as surveyed through the interrelationships of the visual arts, music, literature, philosophy and social history. The course provides transition between the study of the early and the modern cultures focusing on the European Renaissance, Enlightenment and 19th century as they relate to other world developments. The course includes reading and writing competencies. Three contact hours.

HUM 2251 Humanities: 20th Century Cultural Perspectives (Y) 3 cr.

Prerequisite: ENC 1101 or satisfactory score on the placement test. This course consists of the study of life and creative expressions of Western culture in its relationship with other world cultures as surveyed through social history, the impact of science and technology on human values and the history of ideas manifested in the arts and letters from the beginning of the 20th century to the present. The course includes reading and writing competencies. Three contact hours.

HUM 2410 Humanities of Asia (Y) 3 cr.

Prerequisite: ENC 1101 or satisfactory score on the placement test. This course surveys Asian cultures and their creative expressions through the media of visual arts, music, literature and philosophical thought. This course includes reading and writing competencies. Three contact hours.

HUM 2450 Humanities in the Americas (Y) 3 cr.

Prerequisite: ENC 1101 or satisfactory score on the placement test. This course consists of the study of life and creative expressions in the Americas as surveyed through the media of visual arts, music, literature, philosophy and social history. This course includes reading and writing competencies. Three contact hours. (CBE)

HUM 2472 Intercultural Explorations (Y) 3 cr.

Prerequisite: ENC 1101 or satisfactory score on the placement test. This course is a study of human nature, human society and human rights in a specified cultural setting through the humanities, religion, drama, music, dance, the visual arts, myths and legends, and their place in affecting social policies and a culture's vision of its future. Cultures will vary. This course includes reading and writing competencies. Students may repeat this course for credit three times when the cultural setting is changed. However, it can satisfy only three hours in Category B of the General Education Requirements. Additional courses, if taken, must stand as electives only. Particular cultural settings are shown by suffix letter to the humanities designation as follows: HUMA 2472 Greece, HUMB 2472 China, HUMC 2472 Middle East, HUMD 2472 Japan, HUME 2472 France, HUMF 2472 Latin America, HUMG 2472 Soviet Union, HUMH 2472 Spain and HUMI 2472 Germanic Cultures. Three contact hours.

HUM 2511 Music and Art of the Romantic Era (Y) 3 cr.

Prerequisite(s): MUL 1010 and/or ARH 1000. This course will concentrate on the great outpouring of musical genius at work in the 19th century and the equally inspiring work of the artists of the time. The major composers, painters and sculptors will be studied and the common characteristics which they share will be explored. Class lectures will be supplemented with films, videos and compact discs to be reviewed outside class. The course is open to all students, but a background in either music or art is desirable. Three contact hours.

HUM 2931 Humanities Seminar (Y) 1 cr.

Prerequisite: ENC 1101 or satisfactory score on placement test. This course utilizes primary source material from a broad spectrum of arts and sciences to engage students in critical analysis and discussion and to develop communication skills. The course is structured around the Paideia seminar methodology and is facilitated by trained Paideia seminar leaders. Students may only repeat this course three times for credit. One contact hour.

HUN — Human Nutrition

HUN 1003 Weight Management Through Nutrition and Fitness 3 cr.

This course is designed for students to acquire basic principles of nutrition, behavioral analysis and exercise and apply them to the development and implementation of a weight management plan. Three contact hours.

HUN 1201 Human Nutrition 3 cr.

Students will acquire the basic principles of nutrition and develop skill in applying the recommended dietary

allowances to all age groups. The course emphasizes key food nutrients, consumer information regarding food economy, quality food purchasing and maximum nutrition for the life cycle. Three contact hours.

HUN 1203 Culinary Nutrition 3 cr.

Prerequisite: FSS 1221. Culinary nutrition combines a study of the basic principles of nutrition with demonstrations of practical application for the food production industry. Students will study the characteristics and functions of nutrition, the effect of food processing on nutrients, body performance, nutrition and the American diet. In lab students will analyze nutrients in recipes and menus; the use of good nutrition to help prevent disease; and plate presentations utilizing the food guide pyramid. Five contact hours: two lecture hours, three laboratory hours.

HUN 1410 Pediatric Nutrition 3 cr.

Prerequisite: HUN 1201. This course is a study of nutrition from birth through adolescence. Nutritional requirements, daily food needs, assessment of nutritional status, important nutrition concerns, inborn errors of metabolism, food allergies, chronic diseases, nutrition education and responsibilities of health personnel are included. Three contact hours.

HUN 1471 Geriatric Nutrition 3 cr.

Prerequisite: HUN 1201. This course is a study of nutrition in older adults. Aging, nutritional requirements, nutritional assessment, dietary planning, nutrition related problems, chronic diseases and responsibilities of health personnel are included. Three contact hours.

HUS — Human Services

HUS 1345 Introduction to Alcohol and Other Drug Addictions 3 cr.

This course introduces students to the various classes of drugs, their signs and symptoms, and the physiological and psychological processes of addiction. Major concepts associated with these processes will be reviewed. The three major service modalities (prevention, intervention and treatment) will be introduced. Three contact hours.

HUS 1500 Legal and Ethical Aspects of Alcohol and Other Drug Services 4 cr.

Prerequisite: HUS 1345. This course enables students to understand the legal basis for alcohol and other drug services in Florida. The alcohol and drug state statutes and their administrative rules are reviewed. Civil Rights requirements, confidentiality compliance standards and professional ethics will be presented. Four contact hours: three lecture hours, one laboratory hour (clinical).

HUS 2502 Special Issues in Addictions 4 cr.

Prerequisites: HUS 1345, HUS 2682 and HUS 2683. Students will review special critical issues and special populations associated with addiction counseling and prevention. Gender and cultural issues will be explored. Various lifestyles and their relationship to addiction and counseling will be explained. Profiles of risk groups will be examined as well. Four contact hours: three lecture hours, one laboratory hour (clinical).

HUS 2520 Theoretical Aspects of Human Behavior and Addiction Counseling 4 cr.

Prerequisite: HUS 1345. This course enables students to understand some of the more influential theories associated with human behavior/personality theory and addiction. Four contact hours.

HUS 2682 Addiction Counseling: Core Functions I 4 cr.

Prerequisite: HUS 1345. This course enables students to master the core functions of screening, intake and assessment, study the process of identifying problems, establishing goals and deciding on a treatment plan. Additionally, students will learn how to respond to an individual's needs during acute emotional and physical distress. Four contact hours: three lecture hours, one laboratory hour (clinical).

HUS 2683 Addiction Counseling: Counseling Theories Core Functions II 4 cr.

Prerequisite: HUS 2682. This course enables students to master the core functions of making appropriate referrals by studying the relationship in which the counselor helps the client mobilize resources to resolve his/her problems and/or modify attitudes and values. Additionally, students will learn how to achieve established goals through the coordination of multiple service plans, bringing services, agencies or people together within a planned framework. Five contact hours: four lecture hours, one laboratory hour (clinical).

IDS — Interdisciplinary Studies

IDS 1935 Interdisciplinary Studies Seminar (Y) 1 cr.

The IDS seminar provides a structured opportunity for students and professors to participate in special programs, work together in the development of IDS projects and interact in an interdisciplinary environment. Students may repeat the course. Two contact hours.

IND — Interior Design

IND 1020 Principles of Interior Design (Y) 3 cr.

The content of this studio course includes an in-depth study of the elements and principles of design. Students will develop proficiency in the knowledge and application of the elements including color, line, texture, ornament, shape, space — as well as the principles including scale and proportion, balance, rhythm, emphasis and unity and in designing interior spaces. The course will also explore employment opportunities. Four contact hours: two lecture hours, two laboratory hours.

IND 1100 History of Interiors I (Y) 3 cr.

Students will acquire the ability to identify furniture styles, architectural details, and ornamental motifs from the time of our primitive beginnings through the Renaissance period. Research conducted by students is an integral segment of the course. Three contact hours.

IND 1130 History of Interiors II (Y) 3 cr.

Prerequisite: IND 1100. Students will acquire the ability to identify furniture styles, architectural details, and ornamental motifs from the Renaissance period through the 20th

century. Research conducted by students is an integral segment of the course. Three contact hours.

IND 1420 Materials and Sources 3 cr.

This course is a study of the materials of interior design and sources of each. Topics include textiles, floor and wall coverings, furniture, window treatments and accessories. This course includes estimation and installation of materials, and specification guidelines. Three contact hours.

IND 1606 Functions and Psychology of Space 3 cr.

Prerequisite: IND 1020. This studio course analyzes social interactive environments, private and work spaces for residential environments. The psychological use of space, efficiency of traffic patterns, and effectiveness of design are also explored. Students will read, evaluate, modify and execute a floor plan based upon the requirements for the space zones. The course also will explore the multiples of background modifications for visual impact on the total design of an interior space. Students will learn basic drafting skills. Four contact hours: two lecture hours, two laboratory hours.

IND 1935 Building and Barrier Free Codes 2 cr.

This course addresses contract documents, as well as, building interior systems that apply to the interior environment. The content also examines standards related to life safety, building codes, barrier free and testing. Two contact hours: one lecture hour, one laboratory hour.

IND 2150 Why Preservation? (Y) 3 cr.

This course is designed to make students aware of the growing efforts in this country to preserve, protect and utilize our built environment. The course covers the history of the preservation movement, its social, economic, legal and aesthetic ramifications, with an emphasis on preservation in our local area. Three contact hours.

IND 2155 Fundamentals of Restoration and Preservation 3 cr.

This course is designed to introduce students to the design and restoration of older houses. It reviews all the steps necessary to successfully restore a house from preliminary financial and planning problems through the interior and exterior restoration, with the emphasis on how it should look and how it should work. Three contact hours.

IND 2160 Architectural Style 3 cr.

This course includes a comparative analysis of American architecture based on elements of construction. The course emphasizes Jacksonville's unique contributions in the twentieth century. Three contact hours.

IND 2222 Commercial Interiors 3 cr.

Prerequisites: IND 1606, IND 1420, IND 2301 and IND 1935. This course is designed as an approach to developing design solutions for commercial spaces. The course also addresses planning and managing medium to large interior projects. Four contact hours: two lecture hours, two laboratory hours.

IND 2224 Residential and Commercial Design 3 cr.

Prerequisite: IND 1606. This laboratory course, designed to provide skill development in planning residential and commercial interiors from blueprints to the final assembly of all furnishings, emphasizes commercial furnishings, fabrics, building codes and fire regulations. This course also synthesizes working drawings, specifications, and competency in budgeting. Four contact hours: two lecture hours, two laboratory hours.

IND 2301 Perspective Renderings — Housing 3 cr.

This course places emphasis on planning and executing renderings, and the techniques of one and two point linear perspective as they apply to interior space and its furnishings. In this introductory course, students will develop skills in graphically conveying their design concepts into visual illustrations. Four contact hours: two lecture hours, two laboratory hours.

IND 2310 Graphic Presentation Techniques (Y) 3 cr.

Professionalism of graphic illustration is the focus of this course. Students will explore various media for graphic interior design presentations, such as pencils, markers and watercolor renderings. Projects will also include axonometric drawings. Four contact hours: two lecture hours, two laboratory hours.

IND 2410 Specialized Design: Kitchen and Bath Planning 3 cr.

Prerequisite: IND 1606. This laboratory course is designed to provide specialized training in the area of kitchen and bath planning. The course will enable students to create a final assembly of materials, trades, specifications, plans and contracts necessary for presentation. Three contact hours.

IND 2420 Art Acquisitions for Interior Environments 1 cr.

This course covers a broad range of information pertinent to the selection, acquisition, framing and installation of artwork in residential and commercial projects. Students will be aware of all phases, including policy/philosophy, budget, site selection, time and legal constraints, sources, propriety and client image enhancement. One contact hour.

IND 2433 Lighting Design 3 cr.

Prerequisite: IND 1606. This course will cover all of the aspects of lighting design practice as outlined by the Illuminating Engineering Society of North America and the International Association Of Lighting Designers. Creative applications will be explored, and a final presentation will be required. Three contact hours.

IND 2434 Commercial Lighting Design 3 cr.

Prerequisites: IND 1606 and IND 2433. This course covers corrective lighting for commercial and institutional spaces with the intent being to raise students' awareness level relative to the psychological, emotional and aesthetic effects of commercial lighting design. Information on lighting for the aged and infirmed will also be included. This course is outlined by the Illuminating Engineering Society of North America. Work experience in the area of basic lighting may substitute for the prerequisites. Three contact hours.

IND 2462 Computer Aided Commercial Design 3 cr.

Prerequisite: IND 1606. This course is a study in the automation of the design process through computerization. Using proven, specific products and methods, students will glean professional knowledge of the most current practices in this field. As a continuation of existing CADD courses, students will move from an overview of this technology to hands-on practical commercial applications from programming studies through final presentation graphics. Five contact hours: one lecture hour, four laboratory hours.

IND 2502 Marketing Techniques for the Interior Designer 3 cr.

Prerequisites: IND 1420 and IND 1606. Utilization of marketing techniques in selling interior design materials is the focus of this course. To develop skills in providing consumer information to the client, students will plan and execute marketing strategies utilizing visual aids and display areas. Three contact hours.

IND 2931 Inter-relationship of Design With Environments 3 cr.

Prerequisite: interior design major or approval from interior design director. This course will provide a wide range of design experiences through lectures, group discussions, research and field tours. Topics which will be explored are special populations, economic and psychological factors, as well as environmental concerns. Architectural styles with an emphasis on preservation and renovation will be stressed. To receive credit for this course, students must complete a thesis paper. These papers will be submitted to the Journal of Interior Design and Research (JIDER) for possible publication. Additional costs will be required by students for trips. Three contact hours.

IND 2945 Interior Design Internship and Seminar 5 cr.

Prerequisite: approval of the program director. After completion of professional courses, students will work on the job as interns under the supervision of qualified personnel in interior design firms within the community. Course theories and skills will be applied in this work experience. The internship training program requires 15 weeks for a total of 300 hours. A two-hour classroom seminar will be held bimonthly on campus. Twenty-one contact hours: one lecture hour, twenty field experience hours.

INR — International Relations**INR 2002 International Relations (Y) 3 cr.**

This course is a study of the nature of the international political system with emphasis on the concepts of national interest and power with respect to the relations of nation states. This course examines the function and role of international organizations. Three contact hours.

ISC — Interdisciplinary Science — Natural**ISC 1001 Fundamentals of Natural Science (Y) 3 cr.**

This course, designed to allow students to study processes of science, concepts of science, natural phenomena and/or current problem areas, consists of selected topics studied in terms of their relationship and significance to the various science disciplines. This course is not designed as

an introductory or preparatory course for any specific science. Three contact hours.

ISS — Interdisciplinary Social Sciences

ISS 1120 Origins of American Society (Economic, Political and International Institutions) (Y) 3 cr.

This course is an examination of American political institutions, American economic institutions and America's leadership in the world. This course includes a study of the United States Constitution. The course includes reading and writing competencies. This course serves to meet the Gordon Rule writing requirement. Three contact hours. (CBE)

ITA — Italian Language

ITA 1000 Conversational Italian (Y) 3 cr.

This course concentrates on the development of oral and conversational skills in the language. Communicative habits and cultural patterns that influence everyday conversation will be included. Visual and auditory aids will be used. Students are expected to work independently in the language lab and with audio tapes. This course is designed for everyday use of the language; it will not fulfill the general education foreign language requirements of the State University System. Three contact hours (unsupervised lab work).

JOU — Journalism

JOU 2100 Newspaper Reporting and Writing (Y) 3 cr.

Prerequisite: ENC 1101 with a grade of "C" or better. This course will introduce basic newspaper reporting procedures, including writing news leads, organizing stories, interviewing techniques and ethics. The role of the reporter will also be addressed. Since computer training will be included, it is recommended that students have basic typing skills before enrolling in this course. Practice in actual reporting will be gleaned from writing for the student newspaper. Three contact hours.

JOU 2200 Newspaper Editing and Design (Y) 3 cr.

Prerequisite: JOU 2100. This course includes the basic rules of editing including accuracy, brevity, clarity and style coupled with the designing of the newspaper pages using art, photos and headlines. Three contact hours.

JPN — Japanese Language

JPN 1000 Conversational Japanese (Y) 3 cr.

This course concentrates on the development of oral and conversational skills in the language. Communicative habits and cultural patterns that influence everyday conversation will be included. Visual and auditory aids will be used. Students are expected to work independently in the language lab and with audio tapes. This course is designed for everyday use of the language; it will not fulfill the general education foreign language requirements of the State University System. Three contact hours (unsupervised lab work).

LAH — Latin American History

LAH 2000 History of the Americas (Y) 3 cr.

This course consists of a study of the nations of the Western Hemisphere including Canada from colonial times

to the present with special emphasis on Latin America. Three contact hours.

LEI — Leisure

LEI 1262 Outdoor Adventure Initiatives (Y) 2 cr.

This outdoor adventure course provides students with personal growth opportunities through a series of initiative challenges. It is designed to develop self-knowledge, self-esteem and the social skills required for positive group interaction. It will also provide students with the experience of functioning as members of a highly supportive group. Two contact hours: one lecture hour, one activity hour.

LEI 1263 Wilderness Adventure Training (Y) 3 cr.

This is a coeducational course which provides the opportunity for students to acquire the knowledge and skills for adventuring into and through the wilderness. Expeditions (day and overnight) are included. A cost for the expeditions will be assessed. Four contact hours.

LEI 1264 Wilderness Backpacking (Y) 2 cr.

Prerequisite: LEI 1263 or instructor's consent. This course is a coeducational course which provides the opportunity for students to acquire the knowledge and skills to safely hike and backpack. Backpacking expeditions (day and overnight) are included. A cost for the expeditions will be assessed. Three contact hours: one and one-half lecture hour, one and one-half activity hour.

LEI 2265 Facilitating Outdoor Challenge Activities (Y) 3 cr.

Prerequisites: basic first aid and current CPR certification. This course is designed for individuals who are interested in developing facilitator skills for working with small groups using outdoor challenge activities. It provides an overview of experimental learning theory as applied to these activities, specific strategies for managing issues of safety and group dynamics, basic knowledge and practical experience in managing approximately 30 to 40 activities (low ropes challenges and non-ropes initiatives) and the development of processing skills based on a brief-experience-debrief model. Appropriate group goals for these activities include trust and cooperation, communication, problem solving/decision making and leadership/team building. Three contact hours.

LEI 2266 Outdoor Adventure Education Seminar (Y) 2 cr.

Corequisites: LEI 2268 and LEI 2269 or instructor's consent. This course provides a foundation for developing outdoor education skills and knowledge in a practical environmental and wilderness setting. Emphasis will be on students learning techniques and methods to be applied as outdoor leaders. A cost for activities and trips will be assessed. Two contact hours.

LEI 2268 Introduction to Outdoor Adventure Leadership (Y) 3 cr.

This course provides the foundation for developing outdoor leadership and group dynamics in a practical wilderness setting. Emphasis will be involved in students acting

as both leaders and as members of a group operating in an expedition environment. A cost for activities and trips will be assessed. Three contact hours.

**LEI 2269 Outdoor Adventure/
Education Practicum (Y) 5 cr.**

Corequisites: LEI 2268 and LEI 2266 or instructor's consent. This course provides a practicum for outdoor leadership training by means of a field expedition in a range of situations, a variety of weather conditions and a long-term exposure to group dynamics. Students will conduct and lead in a set of diverse outdoor activities such as backpacking, camping, canoeing, mountaineering and rockclimbing. A cost for activities and trips will be assessed. Seven contact hours: five lecture hours, two activity hours.

LEI 2330 Camp Counseling (Y) 3 cr.

Prerequisite: LEI 1263. The purpose of this course is to develop leadership qualities for working with people in a recreation situation and also to provide the knowledge and skills necessary for living in, enjoying and preserving the outdoors. The course includes two overnight camping trips. Three contact hours.

LIN — Linguistics

**LIN 2670 English Grammar:
Usage and Mechanics (Y) 3 cr.**

Prerequisite: ENC 0021 or satisfactory score on the placement test. This course provides a brief history of the English language, an overview of developments in American English, instruction in dictionary usage, and an intensive study of traditional American English grammar usage and mechanics for those students who wish to improve both their understanding and use of standard American English. This course also includes CLAST writing competencies with emphasis on preparation for the CLAST English language skills exam. The course does not replace a college preparatory course which students may be required to take. Three contact hours.

LIS — Library Sciences

LIS 2001 Use of Books and Libraries (Y) 1 cr.

This course is designed to provide students with the basic knowledge concerning the use of library materials and research methods. Students will be taught to use reference materials and given hands-on assignments. One contact hour (lecture/activity/lab).

LIS 2002 Electronic Access to Information (Y) 1 cr.

This course is an introduction to the learning resource centers. It is designed to provide students with basic knowledge concerning electronic access to information, the use of library materials and research strategies. Students will be taught to use a variety of information resources, including LINCC, the Information Gateway, Internet and a selection of CD-ROM databases and will have hands-on access to these materials. One contact hour.

LIT — Literature

LIT 2000 Introduction to Literature (Y) 3 cr.

Prerequisite: ENC 1101 with a grade of "C" or better. This course emphasizes reading selections for understanding, appreciation and written analysis of selected works. The course considers the major literary forms and their distinctive characteristics and conventions, principle literary themes and different critical approaches. The purpose of the course is to increase personal satisfaction in literature and to prepare students for further literary study. Three contact hours. (CBE)

LIT 2100 Great Ideas in World Literature (Y) 3 cr.

Prerequisites: ENC 1101 with a grade of "C" or better. This course surveys universal themes and ideas in representative masterpieces of the world's literary traditions from ancient times into the 20th century. The selections in translations reflect man's perennial search for meaning in attempting to define relationships to self, society and the universe. This course includes reading and writing competencies. Three contact hours.

LIT 2370 The Bible as Literature (Y) 3 cr.

Prerequisite: ENC 1101 with a grade of "C" or better. This course is a study of the development of the Bible and its influence on literature and humanity. Three contact hours.

LIT 2380 Introduction to Women in Literature (Y) 3 cr.

Prerequisite: ENC 1101 with a grade of "C" or better. This course surveys 19th and 20th century men and women writers depicting traditional and contemporary images of women. This course encourages an appreciation of how literature by and about women has contributed to the development of fiction and poetry in the English language. This course includes reading, speaking and writing competencies. Three contact hours.

**LIT 2930 Special Topics in Literature:
An Introduction to Multicultural Literature (Y) 2 cr.**

Prerequisite: ENC 1101. This course is problem-, issue-, subject-centered in its approach to the field of literature. It provides an awareness of and appreciation for major themes, movements and writers through an in-depth study of specific literary works as they relate to the special topic. The selected topic will have a multicultural emphasis. The course may be repeated only three times for credit. Consult newspaper schedule for official topics. Two contact hours.

MAC — Mathematics: Calculus and Precalculus

MAC 1102 College Algebra (Y) 3 cr.

Prerequisite: MAT 0025 with a grade of "C" or better or satisfactory score on the placement test. The major topics included in this course are exponents, roots and radicals, equations and inequalities, relations and functions, graphs, systems of equations and inequalities, and applications. A review of algebraic techniques is also included in this course as well as the algebraic, geometric and measurement skills measured by CLAST. Three contact hours.

MAC 1114 College Trigonometry (Y) 3 cr.

Prerequisite: MAC 1102 with a grade of "C" or better or a strong high school algebra background. The major topics

in this course are circular functions, solving triangles, trigonometric identities and functions, inverse relations and trigonometric equations, complex numbers and polar coordinates. Three contact hours. (CBE)

MAC 1140 Precalculus Algebra (Y) 4 cr.

Prerequisite: MAC 1102 with a grade of "C" or better or satisfactory score on the placement test. The major topics included in this course are linear equations and inequalities, quadratic equations and inequalities, relations, functions and graphs, exponential and logarithmic functions, systems of equations and inequalities, higher degree polynomial equations, matrices and determinants, applications, sequences, series and the binomial theorem, and mathematical proof. A review of algebraic techniques and operations as well as a review of exponents, radicals, complex numbers and absolute value is also included in this course. Four contact hours. (CBE)

MAC 2233 Calculus for Business and Social Sciences (Y) 3 cr.

Prerequisite: MAC 1140 with a grade of "C" or better or satisfactory score on the placement test. This course is designed for students who plan to major in business or the social sciences. It provides an introduction to differential and integral calculus with emphasis placed on applications from business, economics and the social sciences. Linear programming and topics from linear algebra will also be presented. This course cannot be used to satisfy degree requirements for students majoring in mathematics or engineering. Three contact hours.

MAC 2253 Calculus for Engineering Technology (Y) 3 cr.

Prerequisite: MAC 1114. A course designed to give students an introduction into differential and integral calculus with emphasis on their application to engineering problems. Analytical geometry will be introduced where needed to clarify the calculus. Three contact hours.

MAC 2311 Calculus With Analytic Geometry I (Y) 4 cr.

Prerequisites: MAC 1140 and MAC 1114 with grades of "C" or better or two years of high school algebra and one semester of high school trigonometry. This course is designed for students who plan to major in mathematics, science, engineering, computer sciences or any other field that requires the study of calculus. It is the first course of a three-course calculus sequence. The major topics in this course are limits and continuity, differentiation of algebraic and trigonometric functions, applications of the derivative, anti-differentiation, introduction to integration and applications of the definite integral. Four contact hours. (CBE)

MAC 2312 Calculus With Analytic Geometry II (Y) 4 cr.

Prerequisite: MAC 2311 with a grade of "C" or better. This is the second course of the three-course calculus sequence. It is a continuation of integration of algebraic and trigonometric functions as well as integration of other transcendental functions, topics from analytic geometry, indeterminate forms and improper integrals, parametric equations and polar coordinates. Four contact hours.

MAC 2313 Calculus With Analytic Geometry III (Y) 4 cr.

Prerequisite: MAC 2312 with a grade of "C" or better. This is the third course in the calculus with analytic geometry sequence. Topics included in this course are infinite sequences and series, vectors and solid analytic geometry, calculus of functions of several variables and multiple integrals with applications. Four contact hours.

MAE — Mathematics Education

MAE 2801 Mathematics for Elementary Education (Y) 3 cr.

Prerequisite: MGF 1202 or MAC 1102 with a grade of "C" or better. This is a mathematics content course designed for elementary education majors. The topics include: sets, numeration systems, problem solving, whole numbers, integers, rational numbers, irrational numbers, real numbers, percent, elementary logic, measurement and informal geometry. Three contact hours.

MAN — Management

MAN 2021 Principles of Management (Y) 3 cr.

This course consists of a detailed analysis of the management functions of planning, organizing, staffing, directing and controlling as related to an organization. The orderly presentation of fundamental knowledge in management provides students with the framework for further study in the field or the background for practical application of management principles. Three contact hours. (CBE)

MAN 2300 Human Resources Management (Y) 3 cr.

This course is the study of utilization of human resources to accomplish designated objectives. It includes recruiting, selecting, training, promoting and motivating workers. Three contact hours. (CBE)

MAN 2522 Quality Management (Y) 3 cr.

This course will be examined as a comprehensive managerial responsibility. The various philosophies, concepts, practices and methods of quality management are studied and evaluated using a broad and integrated approach including case studies. Three contact hours.

MAN 2590 Materials Management 3 cr.

Prerequisite: MAT 0025 with a grade of "C" or better, or satisfactory score on the mathematics placement test. This course deals with the planning and control of the flow of materials beginning with acquisition from suppliers and continuing through to distribution to customers. This course includes the basics of production planning, purchasing, production control, inventory control, warehousing and distribution. Three contact hours.

MAN 2800 Small Business Management (Y) 3 cr.

This course is designed for students who are primarily interested in the ownership and management of the small business enterprise. It examines and analyzes the managerial function of planning, organizing, staffing, direction and controlling as applied to the small business. Students also study retailing, wholesaling, manufacturing and service-type business organizations. Three contact hours.

MAP — Mathematics: Applied

MAP 2302 Differential Equations (Y) 3 cr.

Prerequisite: MAC 2312 with a grade of “C” or better.

This course consists of a study of the methods of solving ordinary differential equations. The major topics include an introduction to differential equations, first-order differential equations, higher-order differential equations, systems of linear differential equations, the Laplace transform and applications. Three contact hours.

MAR — Marketing

MAR 1011 Principles of Marketing (Y) 3 cr.

This course is an introduction to the process of planning marketing programs for goods and services. Topics covered are marketing management and planning, environment for marketing strategies, market segmentation, market research, consumer buying behavior, product life cycles, pricing, advertising, sales, distribution channels, wholesaling, retailing and international marketing. Three contact hours. (CBE)

MAS — Mathematics: Algebraic Structures

MAS 2103 Elementary Linear Algebra (Y) 3 cr.

Prerequisite: MAC 1102 with a grade of “C” or better. The major topics in this course are systems of linear equations and matrices, determinants, vectors and vector spaces, linear transformations, eigenvalues and eigenvectors, and applications. Three contact hours.

MAT — Mathematics: General

MAT 0002 Basic Mathematics 3 cr.

(College preparatory studies course)

(This course does not apply toward the associate's degree.)

This course is designed for students who lack the basic skills necessary for success in MAT 0024 Elementary Algebra. It provides instruction and practice in computation involving whole numbers, fractions, decimals, percent and signed numbers. Students must attain a passing score on the exit test for satisfactory completion. Three contact hours.

MAT 0024 Elementary Algebra 4 cr.

(College preparatory studies course)

(This course does not apply toward the associate's degree.)

Prerequisite: MAT 0002 with a grade of “C” or better or satisfactory score on the placement test. This course is designed for students who have had little or no algebra. The major topics in this course are sets, real numbers and their properties, exponents and polynomials, linear equations and linear inequalities, as well as an introduction to factoring, radicals and graphing. Students must attain a passing score on the exit test for satisfactory completion. Four contact hours.

MAT 0025 Intermediate Algebra 4 cr.

(College preparatory studies course)

(This course does not apply toward the associate's degree.)

Prerequisite: MAT 0024 with a grade of “C” or better or satisfactory score on the placement test. This course is designed for students who require additional skills in algebra before taking MAC 1102 or MGF 1202. The major topics include sets and real numbers, linear equations and

inequalities with applications, polynomials and factoring, algebraic fractions, exponents, roots and radicals, quadratic equations, relations and functions, graphs and systems of linear equations with applications. This course does not apply toward the associate's degree. Students must attain a passing score on the exit test for satisfactory completion. Four contact hours. (CBE)

MCB — Microbiology

MCB 2013C Microbiology (Y) 4 cr.

Prerequisite: CHM 1020, 1032C, 1045C, or high school chemistry. In addition, students will benefit by taking BSC 1005 or BSC 2010C prior to enrolling in MCB 2013C. This course consists of a study of the protista, viruses, rickettsias and schizomycetes of medical and economic importance. Laboratory exercises introduce bacteriologic techniques and aseptic procedures using various micro-organisms. Six contact hours: three studio hours, three clinical hours. (CBE)

MET — Meteorology

MET 1010 Meteorology (Y) 3 cr.

This course, designed to meet the General Education Requirements in the natural science area, includes the phenomena of weather and climate and the use of atmospheric data to predict the weather. Three contact hours.

MGF — Mathematics: General and Finite

MGF 1202 Finite Mathematics (Y) 3 cr.

Prerequisite: MAT 0025 with a grade of “C” or better or satisfactory score on the placement test. This course is designed for students who plan to major in fields that do not require an in-depth study of mathematics. The major topics introduced in this course are set theory, symbolic logic, applications of rational numbers, place-value numeration systems, geometry and measurement, introductory combinations, probability, and descriptive statistics. The logical reasoning, probability and statistics skills measured by CLAST are among the skills taught in this course. Three contact hours. (CBE)

MGF 2204 Topics in Finite Mathematics (Y) 1 cr.

Prerequisite: MAT 0025 with a grade of “C” or better or satisfactory score on the placement test. This course introduces students to the basic principles of symbolic logic, the theory of probability, some of the statistical methods used in the collection, presentation, description and interpretation of data, and informal geometry. It is designed to focus attention on the importance of logical thinking, provide a foundation for the mathematical study of uncertainties and familiarize students with the terminology and concepts of both statistics and informal geometry. This course is intended for students who are planning to take the CLAST and need additional preparation. One contact hour (for 15 weeks) or three contact hours (for five weeks).

MHF — Mathematics — History and Foundations

MHF 2404 Introduction to the History of Mathematics (Y) 3 cr.

Prerequisite: MAC 2311. This course is a chronological study of the evolution of mathematical thought from primitive counting to modern ideas of the 20th century. This

course does not satisfy the General Education Requirement for mathematics. Three contact hours.

MIS — Military Science

MIS 1000 Introduction to the Army as a Profession (Y) 1 cr.

This course introduces students to military science and the organizational approach to leadership. Military topics will include first aid, communication and introductory map reading. The leadership portion will include the leader's responsibilities, the problem-solving process, basic traits of a leader and counseling techniques. The first aid portion will cover the four lifesaving steps of mouth-to-mouth resuscitation, treatment of an open and closed fracture, stopping arterial bleeding and treatment for shock. Introductory map reading will include the use of a map, the grid system and identification of major terrain features. Two contact hours (drill training).

MIS 1020 Organization of the Army and ROTC (Y) 1 cr.

This introductory course outlines the organization and mission of the Army, Army Reserve, National Guard and Reserve Officer Training Corps. The course places special emphasis on the different branches of the Army, the Officer Personnel Management System and the benefits of a commission in the active Army, Army Reserve or National Guard. Discussions include the role of the Army officer, the noncommissioned officer and the relationship between these two positions. The course also examines the customs and traditions of the service with courtesy. Two contact hours (drill training).

MIS 2400 Leadership Development Through Personal Growth (Y) 1 cr.

Through a combination of classroom theory and laboratory practical application, this course presents an in-depth view of leadership strengths and weaknesses. It also offers tools for development and growth as leaders in today's society. This course is designed to prepare students for progression into advanced leadership skills at the upper-division level. Students must attend a two-hour weekly leadership workshop in which experimental adult learning takes place through individual and group development exercises. Three contact hours (lecture/leadership training).

MIS 2621 Survival and Adventure Training (Y) 1 cr.

This course teaches survival skills by examining the mental aspects of learning how to find food, water and shelter, determining direction and traveling through different types of terrain. In addition, students will learn how to maintain health and administer emergency first aid techniques. Students will be encouraged to attend a weekend training seminar in a survival setting and will be required to attend a two-hour leadership laboratory. Three contact hours (lecture/leadership laboratory).

MKA — Marketing Applications

MKA 1021 Salesmanship (Y) 3 cr.

This course, an introduction to the art of effective salesmanship, analyzes and studies types and problems of

psychology of sales situations, buying motives, customer approach and sales techniques. Three contact hours.

MLT — Medical Laboratory Technology

MLT 1022C Introduction to Health Technology 3 cr.

The course enables students to apply basic mathematical concepts, medical laboratory ethics, and basic medical laboratory techniques. Given instruction in introductory clinical laboratory sciences, students will study and practice specimen collection and handling and laboratory safety procedures. Four contact hours (lecture/laboratory). (CBE)

MLT 1300C Hematology 4 cr.

Prerequisite: consent of department. This course emphasizes instruction in the theories and techniques of routine hematology, including the hematopoietic system, clinical correlations and related laboratory procedures. Peripheral blood cell enumeration, cell identification and morphology, and hemo-globin analysis are emphasized. Six contact hours (lecture/laboratory). (CBE)

MLT 1330C Hemostasis 2 cr.

Prerequisite: consent of department. This course presents the principles and laboratory procedures related to the assessment of hemostasis, including the functions of the vasculature, platelets, coagulation factors and the fibrinolytic system. Three contact hours (lecture/laboratory).

MLT 1405C Medical Microbiology 4 cr.

Prerequisite: consent of department. This course presents students with instruction in the theory, taxonomy, identification, clinical relevance and laboratory procedures associated with the microbiological agents of infectious disease including clinically significant bacteria, mycobacteria, mycoplasma, chlamydia, rickettsia and viruses. Methods of susceptibility testing are also included. Six contact hours (lecture/laboratory). (CBE)

MLT 1440C Parasitology/Mycology 2 cr.

Prerequisite: consent of department. This course presents students with instruction in the taxonomy, life cycles, identification and pathogenesis of the clinically significant parasitic agents. The course also includes the taxonomy, identification, pathogenesis and laboratory procedures associated with the clinically significant fungi. Three contact hours (lecture/laboratory).

MLT 2150C Clinical Correlations 2 cr.

Prerequisites: consent of department. This course presents selected topics in advanced laboratory techniques, together with their significance in the diagnosis of diseases. Students build on a fundamental knowledge of clinical laboratory analysis and human pathology to understand more complex laboratory diagnostic procedures in the areas of hematology, endocrinology, therapeutic drug monitoring and microbiology. Three contact hours (lecture/laboratory).

MLT 2190C Histology 4 cr.

Prerequisite: consent of instructor. This course will present the study of human organs and tissues for the purpose of developing histotechnological skills. Emphasis will be

placed on recognition, composition and functions of the organs and tissues. Macroscopic and microscopic laboratory examination and evaluation of specimens are included. This course may be offered by way of Internet. Six contact hours (lecture/laboratory).

MLT 2191 Histotechniques I 4 cr.

Prerequisite: consent of instructor. This course will introduce students to the fundamental principles of histologic technology. Included in this course are the laboratory aspects of specimen preparation, fixation, sectioning and routine staining. Laboratory safety, quality assurance, and general health career concepts are covered. This course may be offered by way of Internet. Four contact hours. (CBE)

MLT 2191L Histotechniques I Lab 1 cr.

Prerequisite: consent of instructor. This course will introduce students to fundamental laboratory skills and safety concepts in histologic technology. Students will learn how to process, embed, cut and stain various types of tissue specimens. Issues of safety and quality assurance will be stressed. Two contact hours (laboratory).

MLT 2192 Histotechniques II 4 cr.

Prerequisite: consent of instructor. This course is a continuation of Histotechniques I. Students will continue to develop and learn the complex laboratory procedures employed in current histotechnology settings, including special stains, immunochemistry, electron microscopy, and cryostat procedures. This course may be offered by way of Internet. Four contact hours.

MLT 2192L Histotechniques II Lab 1 cr.

Prerequisite: consent of instructor. This course is a continuation of Histotechniques I Lab and will introduce students to the more complex laboratory skills in histologic technology. Students will focus on special stains, special techniques, troubleshooting routine and special stains, and will be introduced to immunohistochemistry techniques. Issues of safety and quality assurance will be stressed. Two contact hours (laboratory).

MLT 2193C Histopathology 3 cr.

Prerequisite: consent of instructor. This course provides students with the correlations between histotechnological procedures and disease processes. Students will study the changes in tissue that are associated with various disease states and will learn the usefulness of selected special stains and techniques in identifying disease processes. Evaluation of acceptability of tissue procedures will be stressed. This course may be offered by way of Internet. Four contact hours (lecture/laboratory).

MLT 2194 Histotechniques III 3 cr.

Prerequisite: consent of instructor. This course is a continuation of Histotechniques II. Students will advance their knowledge of special histologic technology procedures including immunohistochemistry, cytogenetics, and flow cytometry. This course will also include special topics in employment skills, education strategies and management concepts pertaining to histology. This course may be offered by way of Internet. Three contact hours.

MLT 2194L Histotechniques III Lab 1 cr.

Prerequisite: consent of instructor. This course is a continuation of Histotechniques II Lab. Students will explore unique areas of the field of histology, such as flow cytometry and advanced immunohistochemistry. Emphasis will be placed on troubleshooting special stains and procedures. Two contact hours (laboratory).

MLT 2230C Clinical Microscopy 2 cr.

Prerequisite: consent of department. This course instructs students in the evaluation and clinical correlations of urinalysis and selected other body fluids. Included in this course is the study of renal function, renal diseases, cerebrospinal fluid, transudates, exudates, seminal fluid, amniotic fluid and gastric analysis. Three contact hours (lecture/laboratory).

MLT 2500C Clinical Immunology 4 cr.

Prerequisite: consent of department. This course relates the biology of the immune response to the clinical manifestations of selected diseases. Course content includes antigen-antibody reactions, immuno-globulin structures and functions, and lymphocyte interactions. As well, the clinical significance and laboratory procedures related to inflammatory conditions, bacterial and viral pathogens, autoimmune disorders, immunogenetics, chromosomal disorders are included. Six contact hours (lecture/laboratory).

MLT 2525C Immunohematology 3 cr.

Prerequisite: consent of department. This course relates the concepts of immunology to blood banking procedures using the guidelines of the American Association of Blood Bank (AABB). The course content includes antigen-antibody reactions, immunoglobulin structures and functions, complement interaction, clinically significant blood group systems, antibody detection and identification, immunologic disease of the newborn, compatibility testing and component therapy. Four contact hours (lecture/laboratory).

MLT 2610C Clinical Chemistry 3 cr.

Prerequisites: consent of department. This course instructs students in the theory, clinical correlations and laboratory procedures related to the study of proteins, enzymes, carbohydrates, lipids, non-protein nitrogen compounds and liver function testing. Included in the course are quality assurance principles, laboratory mathematics and the study of basic instrumentation principles. Four contact hours (lecture/laboratory). (CBE)

MLT 2800L Clinical Practicum I 8 cr.

Prerequisite: MLT 2150C or consent of department. Assigned to a clinical affiliate of the medical laboratory technology program, students will be instructed in current laboratory procedures and instrument use appropriate for developing entry-level career skills. The supervised learning experiences are under the coordination and responsibility of the program faculty. Twenty-seven and one-half contact hours (laboratory).

MLT 2801L Clinical Practicum II 9 cr.

Prerequisite: MLT 2800L. This course is a continuation of Clinical Practicum I. Students continue in their assigned clinical affiliate under the coordination and responsibility of

the program. Twenty-seven and one-half contact hours (laboratory).

MLT 2840L Histotechnology Practicum I 6 cr.

Prerequisite: consent of the instructor. Assigned to both the student lab and to a clinical affiliate of the histologic technology program, students will be instructed in current laboratory procedures and instrument use appropriate for developing entry-level career skills as a histotechnologist. The supervised learning experiences are under the coordination and responsibility of the program faculty. Eighteen contact hours (laboratory).

MLT 2841L Histotechnology Practicum II 8 cr.

Prerequisite: consent of instructor. This course is a continuation of Histotechnology Practicum I. Students continue in their assigned clinical affiliate under the coordination and supervision of the program. Twenty-four contact hours (laboratory).

MMC — Mass Media Communications

MMC 1000 Introduction to Mass Communications (Y) 3 cr.

Prerequisite: ENC 1101 with a grade of "C" or better. This course provides a general introduction to the mass media. It traces the development of print, broadcast, and electronic communications. This course examines the communication process as well as the responsibilities of the mass media. Three contact hours.

MMC 2100 Writing for Mass Communications (Y) 3 cr.

Prerequisite: ENC 1101 with a grade of "C" or better. This course provides basic instruction and practice in developing and writing news stories for print and broadcast media. NOTE: Students should have keyboarding skills and should be familiar with computer word processing. Three contact hours.

MNA — Management: Applied

MNA 2400 Labor Relations (Y) 3 cr.

This course is an introduction to labor relations. It presents an overview of labor relations beginning with the history of the subject, progressing through developments in the field, federal laws and recent trends. The course is designed to present a definition of labor relations and a working knowledge of the basic concepts involved. Three contact hours.

MRE — Medical Records

MRE 1000 Health Information Management I (Y) 4 cr.

Prerequisites: BSC 2086C and HSC 1531. This course is an introduction to the health information management system, the role of the health information professional as a member of the health care team and principles of medical record management, including record content and format. Four contact hours.

MRE 1202 ICD-9-CM Coding Principles and Laboratory (Y) 4 cr.

Prerequisites: MRE 1000, HSC 1531 and MRE 1430. This course will include various disease and operation classification systems and nomenclature with greater emphasis on ICD-9-CM applications. Four contact hours: three lecture, one laboratory.

MRE 1430 Concepts of Disease 3 cr.

Prerequisites: BSC 2085C and BSC 2086C. This course is an integrated approach to specific disease entities affecting the human body. Three contact hours.

MRE 1800 Health Information Practicum I (Y) 2 cr.

Prerequisites: MRE 1000 and MRE 2640. This course will provide students with a supervised experience in an assigned health care facility's medical records department. Emphasis will be placed on primary medical record functions of record assembly, analysis, medicolegal procedures, preparation records for storage and equipment use. Five contact hours (health care facility).

MRE 2201 Health Information Management II 3 cr.

Prerequisites: MRE 1000, MRE 2640 and MRE 1800. Corequisite: OST 2335. This course will provide students with a working knowledge and understanding in the use of acceptable terminology, definitions and formulas necessary to compute standard rates, percentages and averages from inpatient hospital data. Hospital organization and planning of hospital services in relation to community needs and resource management will also be examined. Three contact hours.

MRE 2203 CPT-4 Coding and Reimbursement Issues (Y) 4 cr.

Prerequisites: MRE 1430, MRE 1000, MRE 1800 and MRE 1202. This course is an integrated approach to develop skills in the area of the Physician's Current Procedural Terminology (CPT-4) system for outpatient procedures performed in an acute care setting or a physician office. Four contact hours.

MRE 2304 Health Information Management III (Y) 3 cr.

Prerequisites: MRE 2201 and MRE 2810. This course provides major focus on medical record department management, departmental design and supervisory principles and practices. Total quality improvement principles will also be explored. Three contact hours.

MRE 2640 Health Law 3 cr.

Prerequisites: HSC 1531 and MRE 1000. This course is an in-depth study of federal, state and local laws which govern the preparation and use of records and information in the health care delivery system. Three contact hours.

MRE 2810 Health Information Practicum II (Y) 2 cr.

Prerequisites: MRE 1000 and MRE 1800. Corequisite: MRE 2201. This course will provide training for students in a well organized and staffed medical record department under the supervision of experienced health information professionals. Five contact hours (clinical).

MRE 2820 Health Information Practicum III 3 cr.

Prerequisites: MRE 1800, MRE 2201 and MRE 2810. This course is a supervised experience in a medical record department, offering experience in supervision, utilization management, medical review audit and overall chart flow processes. Six contact hours (clinical).

MUSIC COURSES

MUC — Music: Composition

MUC 1301 Introduction to Electronic Music (Y) 2 cr.

Prerequisite: consent of professor. This beginning course in the history and practice of electronic music includes laboratory work with tape recorders and synthesizers. Three contact hours (rehearsal).

MUE — Music: Education

MUE 1440 String Techniques (Y) 1 cr.

Open to music majors, this course teaches basic performance skills on violin, viola, violin-cello or double bass. Two contact hours (rehearsal).

MUE 1450 Woodwind Techniques (Y) 1 cr.

The course, open to music majors, teaches basic performance skills on clarinet or flute. Two contact hours (rehearsal).

MUE 1460 Brass Techniques (Y) 1 cr.

This course, open to music majors, teaches basic performance skills on trumpet or trombone. Two contact hours (rehearsal).

MUE 1470 Percussion Techniques (Y) 1 cr.

Open to music majors, this course teaches basic performance skills on percussion instruments with emphasis on rudimental snare drumming. Two contact hours (rehearsal).

MUG — Music: Conduction

MUG 1201 Basic Conducting (Choral) (Y) 2 cr.

Prerequisite: MUT 1121 and/or consent of professor. This course provides students with an introduction to basic techniques used in directing choral rehearsals and performances. Three contact hours (rehearsal).

MUH — Music: History

MUH 1018 Jazz Appreciation (Y) 3 cr.

This course is designed to serve as an introduction to the musical elements, forms and style periods that comprise jazz. Emphasis will be given to jazz artists' lives and their contribution to the art form. Presentational means are intended to both stimulate an appreciation for jazz and to develop listening skills. Three contact hours.

MUH 2051 Folk and Traditional Music of World Cultures (Y) 3 cr.

This course is for students with little or no previous musical training. It offers an introduction to the study of folk music, emphasizing those cultural sources that have had the most influence on music developing in the Americas: namely Europe, Sub-Saharan Africa, Latin America and North America. Three contact hours.

MUH 2052 Music in Contemporary Cultures (Y) 3 cr.

Prerequisite: ANT 2410. Open to all students as an elective, this is a survey course to explore the basic methods of how music is maintained within a given culture as an

artistic medium and as a source of cultural continuity, reflecting the values of a given culture or society. Three contact hours.

MUH 2110 Survey of Music History (Y) 3 cr.

Prerequisite: ENC 1101 or satisfactory score on placement test and ability to read music. This course consists of a study of music from the early Medieval period to the present day with an emphasis upon the stylistic trends of each period. This course, recommended for music majors, is also open to other students and includes reading and writing competencies. Three contact hours.

**MUH 2561 African-American Music:
A Vocal Study (Y) 3 cr.**

Open to all students as an elective, this course studies the origins of the styles of African-American music beginning with its African origins and proceeding to its development in the New World and subsequent influence on America's indigenous music forms through the present day. The course emphasizes vocal idioms, including minstrelsy, blues, rhythm and blues, soul, rock, gospel and jazz. Three contact hours.

MUL — Music: Literature

MUL 1010 Music Appreciation (Y) 3 cr.

Prerequisite: ENC 1101 or satisfactory score on placement test. This course is an introduction to musical elements, forms and style periods with emphasis on composers' lives, musical characteristics and representative works. Designed to stimulate the students' love for music and to formulate listening skills. This course includes reading and writing competencies. Three contact hours.

MUM — Music: Commercial

MUM 1600 Recording Techniques I (Y) 3 cr.

This course is open to all students. It offers beginner basic information in the art of recording vocal and instrumental sound with emphasis on understanding the functions of recording equipment, placement of microphones, making initial recordings of various groups or soloists and the ability to mix down the initial recordings. Six contact hours: two lecture hours, four studio hours.

MUM 1601 Recording Techniques II (Y) 3 cr.

Prerequisite: MUM 1600. This course is a continuation of Recording Techniques I with emphasis on a more thorough understanding of the function of each piece of equipment in the recording studio. It offers second semester students more advanced information on the mix-down process. This course has a \$15 materials fee. Six contact hours: two lecture hours, four studio hours.

MUN — Music: Music Ensembles

MUN 1130 Symphonic Band (Y) 1 cr.

Prerequisite: consent of professor/audition. This course, a requirement for all woodwind, brass and percussion majors, includes traditional and contemporary band literature. The music department urges all students with previous experience and consent of the professor to participate.

Students may select this course for credit each semester with up to four credits counting toward the A.A. degree. Five contact hours (rehearsal).

MUN 1280 Community Orchestra (Y) 1 cr.

Prerequisite: open by audition to members of the community. The Community Orchestra provides instrumentalists in the College and community an opportunity to perform works representative of a broad spectrum of orchestral literature, refine techniques of ensemble playing and present concerts each term. Membership is by permission of the director and/or audition; string majors must participate. Students may elect to take this course for credit each semester with up to four credits counting toward A.A. degree. Two contact hours (rehearsal).

MUN 1340 Chamber Choir (Y) 1 cr.

Prerequisites: previous choral experience, audition and consent of the director. Corequisite: enrollment in MUNB 1310. The repertoire of the Chamber Choir includes sacred and secular compositions with an emphasis on a capella literature of the 17th through 20th centuries. With membership limited to 15 to 20 singers, students may take this course each semester with up to four elective credits counting toward the A.A. degree. Three contact hours (rehearsal).

**MUN 1380 Community Chorus, Jacksonville
Concert Chorale (Y) 1 cr.**

Prerequisite: open by audition to members of the community. Repertoire for this course includes secular and sacred major works for chorus and orchestra, as well as shorter compositions. Students may elect this course each semester for credit with up to four credits counting toward the A.A. degree or continuing education credit under adult education. Two contact hours (rehearsal).

MUN 1410 String Ensemble (Y) 1 cr.

Prerequisites: open to all students who have experience as players on bowed string instruments and consent of the professor. The department encourages all students who have experience as players on bowed string instruments to audition. The String Ensemble will perform the standard literature for string ensembles both independently and in conjunction with other performing music organizations. Students may elect to take this course for credit each semester with up to four credits counting toward the A.A. degree. Three contact hours (rehearsal).

MUN 1450 Piano Ensemble (Y) 1 cr.

Prerequisite: open to piano majors and principals with consent of the professor. This course provides students with an introduction to multiple piano skills and, chamber music skills. This course may be repeated for credit each semester. Approval of the professor is required for piano minors and non-music majors. Three contact hours (rehearsal).

MUN 1460 Chamber Music Ensembles (Y) 1 cr.

Prerequisite: consent of professor. This course is the study and performance of chamber music literature for small ensembles. Students may select this course for credit each semester with up to four credits counting toward the A.A. degree. Three contact hours (rehearsal).

MUN 1710 Jazz Ensemble (Y) 1 cr.

Prerequisite: consent of the director. Corequisite: MUN 1130 for woodwind, brass and percussion players (unless waived by director). The repertoire includes various styles from jazz and popular literature. Students may select this course for credit each semester with up to four credits counting toward the A.A. degree. Three contact hours (rehearsal).

MUN 1711 Jazz Combo (Y) 1 cr.

Prerequisite: Audition and consent of the professor. Corequisite: MUN 1710 and Principal or Secondary Applied Music. This course is designed to provide jazz ensemble players with the opportunity to perform and study jazz of all styles in and from a small group perspective. Students may select this course for credit each semester with up to four credits counting toward the A.A. degree. Three contact hours (lecture/discussion).

MUNA 1310 College Chorus (Y) 1 cr.

Open to all College students, this course includes many styles of choral music in the repertoire. Students may elect to take this course for credit each semester with up to four credits counting toward the A.A. degree. Three contact hours (rehearsal).

MUNB 1310 College Chorale (Y) 1 cr.

Prerequisites: consent of the director, previous choral experience and/or audition. The repertoire of the College Chorale includes the more difficult sacred and secular compositions, accompanied and unaccompanied. Students may elect this course for credit each semester with up to four credits counting toward the A.A. degree. Five contact hours (rehearsal).

MUO — Music: Opera/Musical Theatre**MUO 1001 Music Theatre Workshop (Y) 1 cr.**

Prerequisite: open by audition. This course is open by audition to individuals interested in theatre and music in the areas of performance and technical operation. Students may elect to take this course for credit each semester with up to four credits counting toward A.A. degree. One major production each term. Three contact hours (rehearsal).

MUR — Music: Church**MUR 2710 Sacred Choral Literature (Y) 3 cr.**

This course will equip church musicians with the basic skills for selecting music, familiarity with basic repertoire, efficient rehearsal techniques and score preparation. Three contact hours.

MUS — Music**MUS 1010 Student Recital (Y) 1 cr.**

This course is required for all music majors. In conjunction with one class meeting each week, students must attend an announced number of FCCJ and community related concerts. Each music major enrolled for two hours of applied music is to perform in a student recital upon the decision of their teacher. Meeting hour is flexible to coincide with special performance times. One contact hour.

MUT — Music: Theory**MUT 1001 Introduction to Music Theory (Y) 3 cr.**

This course, designed for students whose background and theory placement test scores indicate further preparation is needed for MUT 1121, includes work with elementary music terminology, notation, intervals, scales, chords, rhythm, sight singing and dictation. Three contact hours.

MUT 1121 Music Theory I (Y) 4 cr.

Prerequisite: MUT 1001, satisfactory score on placement test or consent of instructor. Corequisite: music majors must also enroll in MUS 1010 Applied Music and a performing organization. This elementary course in music theory and the principles underlying all music includes music terminology, notation, harmony, keyboard harmony, melody and rhythm in addition to sight singing and ear training. Designed for music majors, the course is also open to qualified students. To successfully complete this course, students must receive a passing grade in each of the following areas: written theory, ear training, sight singing and keyboard harmony. Five contact hours: three lecture hours, two rehearsal hours.

MUT 1122 Music Theory II (Y) 4 cr.

Prerequisite: MUT 1121. Corequisite: music majors must also enroll in MUS 1010 Applied Music and a performing organization. This basic course, a continuation of Music Theory I, includes music terminology, notation, harmony, keyboard harmony, melody, rhythm and form as well as sight singing and ear training. Designed for music majors, the course is also open to qualified students. To successfully complete this course, students must receive a passing grade in each of the following areas: written theory, ear training, sight singing and keyboard harmony. Five contact hours: three lecture hours, two rehearsal hours.

MUT 1641 Jazz Improvisation I (Y) 2 cr.

Prerequisite: permission of instructor. Corequisite: MUN 1710. This course is designed to introduce the concepts of jazz improvisation through chord-scale theory and relationships. The technical application of major scales, pentatonic scales, blues scales and modal scales to fundamental chord progressions will serve as the basis by which to create improvisatory solos. Two contact hours.

MUT 1642 Jazz Improvisation II (Y) 2 cr.

This course is a continuation of MUT 1641. The course introduces the application of harmonic and melodic scales, diminished scales, whole tone scales and be-bop scales to chord progressions and jazz standards. Chord-scale substitute concepts will provide comprehensiveness to this advanced study. Two contact hours.

MUT 2126 Music Theory III (Y) 4 cr.

Prerequisite: MUT 1122. Corequisite: music majors must also enroll in MUS 1010 Applied Music and a performing organization. This continuing course in the techniques of analysis and part writing in vocal, keyboard and instrumental styles includes advanced tertian harmony, modulation, sequence and phrase, and part forms along with sight singing and ear training. Designed for music majors, the

course is also open to qualified students. To successfully complete this course, students must receive a passing grade in each of the following areas: written theory, ear training, sight singing and keyboard harmony. Five contact hours: three lecture hours, two rehearsal hours.

MUT 2127 Music Theory IV (Y) 4 cr.

Prerequisite: MUT 2126. Corequisite: music majors must also enroll in MUS 1010 Applied Music and a performing organization. This continuing course in music theory includes altered and chromatic chords, extension of tonality, 20th century harmonic, melodic and rhythmic styles, also advanced sight singing and ear training. Designed for music majors, this course is also open to qualified students. To successfully complete this course, students must receive a passing grade in each of the following areas: written theory, ear training, sight singing and keyboard harmony. Five contact hours: three lecture hours, two rehearsal hours.

MVK — Music: Keyboard

MVKA 1111 Class Piano I (Y) 1 cr.

This course for beginning piano students meets in groups, with emphasis placed on music reading and elementary techniques. This course is required for all music majors, unless exempted. This course is also open to other qualified students. Two contact hours (rehearsal).

MVKB 1111 Class Piano II (Y) 1 cr.

Prerequisite: MVKA 1111. This course is a continuation of Class Piano I and although a requirement for all music majors, the course is open to qualified students with consent of the professor. Two contact hours (rehearsal).

MVKA 2121 Class Piano III (Y) 1 cr.

Prerequisite: MVKB 1111. This course is a continuation of Class Piano II and although a requirement for all music majors, the course is open to qualified students with consent of the professor. Two contact hours (rehearsal).

MVKB 2121 Class Piano IV (Y) 1 cr.

Prerequisite: MVKA 2121. This course is a continuation of Class Piano III. Two contact hours (rehearsal).

MVKA 2621 Basic Piano Pedagogy I (Y) 2 cr.

This introductory class prepares students for professional, private and class piano teaching at the beginner and early elementary level. Three contact hours (lecture/discussion).

MVKB 2621 Basic Piano Pedagogy II (Y) 2 cr.

This class, a continuation of Basic Piano Pedagogy I, prepares students for professional, private and class piano teaching at the upper elementary and intermediate levels through lectures, demonstrations and observations. Three contact hours (lecture/discussion).

MVS — Music: Strings

MVSA 1116 Class Guitar I (Y) 1 cr.

This basic course, designed for students who are interested in studying classic guitar, includes a study of the development of the instrument, past and present guitar

masters, and the music literature for the guitar and technique. Two contact hours (rehearsal).

MVSB 1116 Class Guitar II (Y) 1 cr.

Prerequisite: MVSA 1116. This course is a continuation of Class Guitar I, perfecting and advancing skills learned therein. Two contact hours (rehearsal).

MVSA 2126 Class Guitar III (Y) 1 cr.

Prerequisite: MVSB 1116. This course is a continuation of Class Guitar II, perfecting and advancing skills learned therein. Two contact hours (rehearsal).

MVSB 2126 Class Guitar IV (Y) 1 cr.

Prerequisite: MVSA 2126. This course is a continuation of Class Guitar III, perfecting and advancing skills learned therein. Two contact hours (rehearsal).

MVV — Music: Voice

MVVA 1111 Class Voice I (Y) 1 cr.

This course is for singers wishing to further their vocal skills and instrumentalists wishing a fundamental vocal knowledge. The course emphasizes correct diction and tone production with students receiving individual aid. Two contact hours (rehearsal).

MVVB 1111 Class Voice II (Y) 1 cr.

Prerequisite: MVVA 1111. This course is a continuation of Class Voice I. Two contact hours (rehearsal).

MVVA 2121 Class Voice III (Y) 1 cr.

Prerequisite: MVVB 1111. This course is for singers wishing to develop vocal skills beyond elementary level of correct diction and tone production. The course is also open to instrumentalists wishing more than a basic vocal knowledge and competency level. This course meets as a class, yet emphasizes individual attention. Two contact hours (rehearsal).

MVVB 2121 Class Voice IV (Y) 1 cr.

Prerequisite: MVVA 2121. This course is a continuation of Class Voice III. Two contact hours (rehearsal).

APPLIED MUSIC COURSES

MVB — Music: Brasses

Baritone

MVBA 1014 Applied Preparatory Baritone I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVBB 1014 Applied Preparatory Baritone II (Y) 2 cr.

Prerequisite: MVBA 1014. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

MVBA 1314 Applied Principal Baritone I (Y) 2 cr.

Prerequisite: placement by audition before the music

faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBB 1314 Applied Principal Baritone II (Y) 2 cr.

Prerequisite: MVBA 1314. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBA 2324 Applied Principal Baritone III (Y) 2 cr.

Prerequisite: MVBB 1314. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBB 2324 Applied Principal Baritone IV (Y) 2 cr.

Prerequisite: MVBA 2324. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBA 1214 Applied Secondary Baritone I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

MVBB 1214 Applied Secondary Baritone II (Y) 1 cr.

Prerequisite: MVBA 1214. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

MVBA 2224 Applied Secondary Baritone III (Y) 1 cr.

Prerequisite: MVBB 1214. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

MVBB 2224 Applied Secondary Baritone IV (Y) 1 cr.

Prerequisite: MVBA 2224. Fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy etc.). Two half-hour lessons a week.

MVBA 1414 Applied Major Baritone I (Y) 3 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVBB 1414 Applied Major Baritone II (Y) 3 cr.

Prerequisite: MVBA 1414. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVBA 2424 Applied Major Baritone III (Y) 3 cr.

Prerequisite: MVBB 1414. This is the third semester of

private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVBB 2424 Applied Major Baritone IV (Y) 3 cr.

Prerequisite: MVBA 2424. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVW — Music: Woodwinds
Bassoon**

MVWA 1014 Applied Preparatory Bassoon I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVWB 1014 Applied Preparatory Bassoon II (Y) 2 cr.

Prerequisite: MVWA 1014. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVWA 1314 Applied Principal Bassoon I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWB 1314 Applied Principal Bassoon II (Y) 2 cr.

Prerequisite: MVWA 1314. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWA 2324 Applied Principal Bassoon III (Y) 2 cr.

Prerequisite: MVWB 1314. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWB 2324 Applied Principal Bassoon IV (Y) 2 cr.

Prerequisite: MVWA 2324. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWA 1214 Applied Secondary Bassoon I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

MVWB 1214 Applied Secondary Bassoon II (Y) 1 cr.

Prerequisite: MVWA 1214. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson per week.

MVWA 2224 Applied Secondary Bassoon III (Y) 1 cr.

Prerequisite: MVWB 1214. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVWB 2224 Applied Secondary Bassoon IV (Y) 1 cr.

Prerequisite: MVWA 2224. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWA 1414 Applied Major Bassoon I (Y) 3 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVWB 1414 Applied Major Bassoon II (Y) 3 cr.

Prerequisite: MVWA 1414. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVWA 2424 Applied Major Bassoon III (Y) 3 cr.

Prerequisite: MVWB 1414. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVWB 2424 Applied Major Bassoon IV (Y) 3 cr.

Prerequisite: MVWA 2424. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVS — Music: Strings
Cello****MVSA 1013 Applied Preparatory Cello I (Y) 2 cr.**

Prerequisite: placement by audition before the music faculty. Private lessons and designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVSB 1013 Applied Preparatory Cello II (Y) 2 cr.

Prerequisite: MVSA 1013. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVSA 1313 Applied Principal Cello I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSB 1313 Applied Principal Cello II (Y) 2 cr.

Prerequisite: MVSA 1313. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSA 2323 Applied Principal Cello III (Y) 2 cr.

Prerequisite: MVSB 1313. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSB 2323 Applied Principal Cello IV (Y) 2 cr.

Prerequisite: MVSA 2323. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSA 1213 Applied Secondary Cello I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVSB 1213 Applied Secondary Cello II (Y) 1 cr.

Prerequisite: MVSA 1213. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVSA 2223 Applied Secondary Cello III (Y) 1 cr.

Prerequisite: MVSB 1213. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVSB 2223 Applied Secondary Cello IV (Y) 1 cr.

Prerequisite: MVSA 2223. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSA 1413 Applied Major Cello I (Y) 3 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVSB 1413 Applied Major Cello II (Y) 3 cr.

Prerequisite: MVSA 1413. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVSA 2423 Applied Major Cello III (Y) 3 cr.

Prerequisite: MVSB 1413. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVSB 2423 Applied Major Cello IV (Y) 3 cr.

Prerequisite: MVSA 2423. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVW — Music: Woodwinds
Clarinet

MVWA 1013 Applied Preparatory Clarinet I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVWB 1013 Applied Preparatory Clarinet II (Y) 2 cr.

Prerequisite: MVWA 1013. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVWA 1313 Applied Principal Clarinet I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWB 1313 Applied Principal Clarinet II (Y) 2 cr.

Prerequisite: MVWA 1313. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWA 2323 Applied Principal Clarinet III (Y) 2 cr.

Prerequisite: MVWB 1313. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWB 2323 Applied Principal Clarinet IV (Y) 2 cr.

Prerequisite: MVWA 2323. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWA 1213 Applied Secondary Clarinet I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVWB 1213 Applied Secondary Clarinet II (Y) 1 cr.

Prerequisite: MVWA 1213. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVWA 2223 Applied Secondary Clarinet III (Y) 1 cr.

Prerequisite: MVWB 1213. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVWB 2223 Applied Secondary Clarinet IV (Y) 1 cr.

Prerequisite: MVWA 2223. This is the fourth semester of private lessons designed for students majoring in any

area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWA 1413 Applied Major Clarinet I (Y) 3 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVWB 1413 Applied Major Clarinet II (Y) 3 cr.

Prerequisite: MVWA 1413. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVWA 2423 Applied Major Clarinet III (Y) 3 cr.

Prerequisite: MVWB 1413. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVWB 2423 Applied Major Clarinet IV (Y) 3 cr.

Prerequisite: MVWA 2423. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVW — Music: Woodwinds
Flute

MVWA 1011 Applied Preparatory Flute I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVWB 1011 Applied Preparatory Flute II (Y) 2 cr.

Prerequisite: MVWA 1011. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVWA 1311 Applied Principal Flute I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWB 1311 Applied Principal Flute II (Y) 2 cr.

Prerequisite: MVWA 1311. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWA 2321 Applied Principal Flute III (Y) 2 cr.

Prerequisite: MVWB 1311. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWB 2321 Applied Principal Flute IV (Y) 2 cr.

Prerequisite: MVWA 2321. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWA 1211 Applied Secondary Flute I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVWB 1211 Applied Secondary Flute II (Y) 1 cr.

Prerequisite: MVWA 1211. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVWA 2221 Applied Secondary Flute III (Y) 1 cr.

Prerequisite: MVWB 1211. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVWB 2221 Applied Secondary Flute IV (Y) 1 cr.

Prerequisite: MVWA 2221. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWA 1411 Applied Major Flute I (Y) 3 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVWB 1411 Applied Major Flute II (Y) 3 cr.

Prerequisite: MVWA 1411. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVWA 2421 Applied Major Flute III (Y) 3 cr.

Prerequisite: MVWB 1411. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVWB 2421 Applied Major Flute IV (Y) 3 cr.

Prerequisite: MVWA 2421. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVB — Music: Brasses
French Horn**

**MVBA 1012 Applied Preparatory
French Horn I (Y) 2 cr.**

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVBB 1012 Applied Preparatory
French Horn II (Y) 2 cr.**

Prerequisite: MVBA 1012. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVBA 1312 Applied Principal French Horn I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBB 1312 Applied Principal French Horn II (Y) 2 cr.

Prerequisite: MVBA 1312. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBA 2322 Applied Principal French Horn III (Y) 2 cr.

Prerequisite: MVBB 1312. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBB 2322 Applied Principal French Horn IV (Y) 2 cr.

Prerequisite: MVBA 2322. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

**MVBA 1212 Applied Secondary
French Horn I (Y) 1 cr.**

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVBB 1212 Applied Secondary
French Horn II (Y) 1 cr.**

Prerequisite: MVBA 1212. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVBA 2222 Applied Secondary
French Horn III (Y) 1 cr.**

Prerequisite: MVBB 1212. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVBB 2222 Applied Secondary
French Horn IV (Y) 1 cr.**

Prerequisite: MVBA 2222. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBA 1412 Applied Major French Horn I (Y) 3 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVBB 1412 Applied Major French Horn II (Y) 3 cr.

Prerequisite: MVBA 1412. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVBA 2422 Applied Major French Horn III (Y) 3 cr.

Prerequisite: MVBB 1412. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVBB 2422 Applied Major French Horn IV (Y) 3 cr.

Prerequisite: MVBA 2422. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVS — Music: Strings
Guitar**

MVSA 1016 Applied Preparatory Guitar I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVSB 1016 Applied Preparatory Guitar II (Y) 2 cr.

Prerequisite: MVSA 1016. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVSA 1316 Applied Principal Guitar I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSB 1316 Applied Principal Guitar II (Y) 2 cr.

Prerequisite: MVSA 1316. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSA 2326 Applied Principal Guitar III (Y) 2 cr.

Prerequisite: MVSB 1316. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSB 2326 Applied Principal Guitar IV (Y) 2 cr.

Prerequisite: MVSA 2326. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSA 1216 Applied Secondary Guitar I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVSB 1216 Applied Secondary Guitar II (Y) 1 cr.

Prerequisite: MVSA 1216. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVSA 2226 Applied Secondary Guitar III (Y) 1 cr.

Prerequisite: MVSB 1216. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVSB 2226 Applied Secondary Guitar IV (Y) 1 cr.

Prerequisite: MVSA 2226. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSA 1416 Applied Major Guitar I (Y) 3 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVSB 1416 Applied Major Guitar II (Y) 3 cr.

Prerequisite: MVSA 1416. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVSA 2426 Applied Major Guitar III (Y) 3 cr.

Prerequisite: MVSB 1416. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVSB 2426 Applied Major Guitar IV (Y) 3 cr.

Prerequisite: MVSA 2426. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVW — Music: Woodwinds
Oboe**

MVWA 1012 Applied Preparatory Oboe I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lessons a week.

MVWB 1012 Applied Preparatory Oboe II (Y) 2 cr.

Prerequisite: MVWA 1012. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVWA 1312 Applied Principal Oboe I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWB 1312 Applied Principal Oboe II (Y) 2 cr.

Prerequisite: MVWA 1312. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWA 2322 Applied Principal Oboe III (Y) 2 cr.

Prerequisite: MVWB 1312. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWB 2322 Applied Principal Oboe IV (Y) 2 cr.

Prerequisite: MVWA 2322. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWA 1212 Applied Secondary Oboe I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVWB 1212 Applied Secondary Oboe II (Y) 1 cr.

Prerequisite: MVWA 1212. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVWA 2222 Applied Secondary Oboe III (Y) 1 cr.

Prerequisite: MVWB 1212. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVWB 2222 Applied Secondary Oboe IV (Y) 1 cr.

Prerequisite: MVWA 2222. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWA 1412 Applied Major Oboe I (Y) 3 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for the student majoring in performance. Two half-hour lessons a week.

MVWB 1412 Applied Major Oboe II (Y) 3 cr.

Prerequisite: MVWA 1412. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVWA 2422 Applied Major Oboe III (Y) 3 cr.

Prerequisite: MVWB 1412. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVWB 2422 Applied Major Oboe IV (Y) 3 cr.

Prerequisite: MVWA 2422. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVK — Music: Keyboard
Organ**

MVKA 1013 Applied Preparatory Organ I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVKB 1013 Applied Preparatory Organ II (Y) 2 cr.

Prerequisite: MVKA 1013. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVKA 1313 Applied Principal Organ I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVKB 1313 Applied Principal Organ II (Y) 2 cr.

Prerequisite: MVKA 1313. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVKA 2323 Applied Principal Organ III (Y) 2 cr.

Prerequisite: MVKB 1313. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVKB 2323 Applied Principal Organ IV (Y) 2 cr.

Prerequisite: MVKA 2323. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVKA 1213 Applied Secondary Organ I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVKB 1213 Applied Secondary Organ II (Y) 1 cr.

Prerequisite: MVKA 1213. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVKA 2223 Applied Secondary Organ III (Y) 1 cr.

Prerequisite: MVKB 1213. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVKB 2223 Applied Secondary Organ IV (Y) 1 cr.

Prerequisite: MVKA 2223. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVKA 1413 Applied Major Organ I (Y) 3 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVKB 1413 Applied Major Organ II (Y) 3 cr.

Prerequisite: MVKA 1413. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVKA 2423 Applied Major Organ III (Y) 3 cr.

Prerequisite: MVKB 1413. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVKB 2423 Applied Major Organ IV (Y) 3 cr.

Prerequisite: MVKA 2423. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVO — Music: Other Instruments
Other

MVOA 1010 Applied Preparatory Other I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVOB 1010 Applied Preparatory Other II (Y) 2 cr.

Prerequisite: MVOA 1010. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVOA 1310 Applied Principal Other I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVOB 1310 Applied Principal Other II (Y) 2 cr.

Prerequisite: MVOA 1310. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVOA 2320 Applied Principal Other III (Y) 2 cr.

Prerequisite: MVOB 1310. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVOB 2320 Applied Principal Other IV (Y) 2 cr.

Prerequisite: MVOA 2320. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVOA 1210 Applied Secondary Other I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVOB 1210 Applied Secondary Other II (Y) 1 cr.

Prerequisite: MVOA 1210. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVOA 2220 Applied Secondary Other III (Y) 1 cr.

Prerequisite: MVOB 1210. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVOB 2220 Applied Secondary Other IV (Y) 1 cr.

Prerequisite: MVOA 2220. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVOA 1410 Applied Major Other I (Y) 3 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVOB 1410 Applied Major Other II (Y) 3 cr.

Prerequisite: MVOA 1410. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVOA 2420 Applied Major Other III (Y) 3 cr.

Prerequisite: MVOB 1410. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVOB 2420 Applied Major Other IV (Y) 3 cr.

Prerequisite: MVOA 2420. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVP — Music Percussion
Percussion

MVPA 1011 Applied Preparatory Percussion I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVPB 1011 Applied Preparatory Percussion II (Y) 2 cr.

Prerequisite: MVPA 1011. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVPA 1311 Applied Principal Percussion I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVPB 1311 Applied Principal Percussion II (Y) 2 cr.

Prerequisite: MVPA 1311. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVPA 2321 Applied Principal Percussion III (Y) 2 cr.

Prerequisite: MVPB 1311. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVPB 2321 Applied Principal Percussion IV (Y) 2 cr.

Prerequisite: MVPA 2321. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVPA 1211 Applied Secondary Percussion I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVPB 1211 Applied Secondary Percussion II (Y) 1 cr.

Prerequisite: MVPA 1211. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVPA 2221 Applied Secondary Percussion III (Y) 1 cr.

Prerequisite: MVPB 1211. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVPB 2221 Applied Secondary Percussion IV (Y) 1 cr.

Prerequisite: MVPA 2221. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVPA 1411 Applied Major Percussion I (Y) 3 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVPB 1411 Applied Major Percussion II (Y) 3 cr.

Prerequisite: MVPA 1411. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVPA 2421 Applied Major Percussion III (Y) 3 cr.

Prerequisite: MVPB 1411. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVPB 2421 Applied Major Percussion IV (Y) 3 cr.

Prerequisite: MVPA 2421. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVK — Music: Keyboard Piano

MVKA 1011 Applied Preparatory Piano I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

MVKB 1011 Applied Preparatory Piano II (Y) 2 cr.

Prerequisite: MVKA 1011. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

MVKA 1311 Applied Principal Piano I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). One hour lesson per week.

MVKB 1311 Applied Principal Piano II (Y) 2 cr.

Prerequisite: MVKA 1311. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). One hour lesson per week.

MVKA 2321 Applied Principal Piano III (Y) 2 cr.

Prerequisite: MVKB 1311. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). One hour lesson per week.

MVKB 2321 Applied Principal Piano IV (Y) 2 cr.

Prerequisite: MVKA 2321. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). One hour lesson per week.

MVKA 1211 Applied Secondary Piano I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVKB 1211 Applied Secondary Piano II (Y) 1 cr.

Prerequisite: MVKA 1211. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVKA 2221 Applied Secondary Piano III (Y) 1 cr.

Prerequisite: MVKB 1211. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVKB 2221 Applied Secondary Piano IV (Y) 1 cr.

Prerequisite: MVKA 2221. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). One half-hour lesson per week.

MVKA 1411 Applied Major Piano I (Y) 3 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. One hour lesson per week.

MVKB 1411 Applied Major Piano II (Y) 3 cr.

Prerequisite: MVKA 1411. This is the second semester of private lessons designed for students majoring in performance. One hour lesson per week.

MVKA 2421 Applied Major Piano III (Y) 3 cr.

Prerequisite: MVKB 1411. This is the third semester of private lessons designed for students majoring in performance. One hour lesson per week.

MVKB 2421 Applied Major Piano IV (Y) 3 cr.

Prerequisite: MVKA 2421. This is the fourth semester of private lessons designed for students majoring in performance. One hour lesson per week.

**MVW — Music: Woodwinds
Saxophone**

**MVWA 1015 Applied Preparatory
Saxophone I (Y) 2 cr.**

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

**MVWB 1015 Applied Preparatory
Saxophone II (Y) 2 cr.**

Prerequisite: MVWA 1015. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVWA 1315 Applied Principal Saxophone I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWB 1315 Applied Principal Saxophone II (Y) 2 cr.

Prerequisite: MVWA 1315. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWA 2325 Applied Principal Saxophone III (Y) 2 cr.

Prerequisite: MVWB 1315. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWB 2325 Applied Principal Saxophone IV (Y) 2 cr.

Prerequisite: MVWA 2325. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWA 1215 Applied Secondary Saxophone I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVWB 1215 Applied Secondary
Saxophone II (Y) 1 cr.**

Prerequisite: MVWA 1215. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVWA 2225 Applied Secondary
Saxophone III (Y) 1 cr.**

Prerequisite: MVWB 1215. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

**MVWB 2225 Applied Secondary
Saxophone IV (Y) 1 cr.**

Prerequisite: MVWA 2225. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVWA 1415 Applied Major Saxophone I (Y) 3 cr.

Prerequisite: placement by audition before the faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVWB 1415 Applied Major Saxophone II (Y) 3 cr.

Prerequisite: MVWA 1415. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVWA 2425 Applied Major Saxophone III (Y) 3 cr.

Prerequisite: MVWB 1415. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVWB 2425 Applied Major Saxophone IV (Y) 3 cr.

Prerequisite: MVWA 2425. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVS — Music: Strings
String Bass**

MVSA 1014 Applied Preparatory String Bass I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVSB 1014 Applied Preparatory String Bass II (Y) 2 cr.

Prerequisite: MVSA 1014. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVSA 1314 Applied Principal String Bass I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSB 1314 Applied Principal String Bass II (Y) 2 cr.

Prerequisite: MVSA 1314. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSA 2324 Applied Principal String Bass III (Y) 2 cr.

Prerequisite: MVSB 1314. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSB 2324 Applied Principal String Bass IV (Y) 2 cr.

Prerequisite: MVSA 2324. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSA 1214 Applied Secondary String Bass I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVSB 1214 Applied Secondary String Bass II (Y) 1 cr.

Prerequisite: MVSA 1214. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVSA 2224 Applied Secondary String Bass III (Y) 1 cr.

Prerequisite: MVSB 1214. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVSB 2224 Applied Secondary String Bass IV (Y) 1 cr.

Prerequisite: MVSA 2224. This is the fourth semester of private lessons designed for students majoring in any area of area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSA 1414 Applied Major String Bass I (Y) 3 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVSB 1414 Applied Major String Bass II (Y) 3 cr.

Prerequisite: MVSA 1414. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVSA 2424 Applied Major String Bass III (Y) 3 cr.

Prerequisite: MVSB 1414. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVSB 2424 Applied Major String Bass IV (Y) 3 cr.

Prerequisite: MVSA 2424. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVB — Music: Brasses
Trombone**

MVBA 1013 Applied Preparatory Trombone I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVBB 1013 Applied Preparatory Trombone II (Y) 2 cr.

Prerequisite: MVBA 1013. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVBA 1313 Applied Principal Trombone I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.) Two half-hour lessons a week.

MVBB 1313 Applied Principal Trombone II (Y) 2 cr.

Prerequisite: MVBA 1313. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBA 2323 Applied Principal Trombone III (Y) 2 cr.

Prerequisite: MVBB 1313. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBB 2323 Applied Principal Trombone IV (Y) 2 cr.

Prerequisite: MVBA 2323. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.) Two half-hour lessons a week.

MVBA 1213 Applied Secondary Trombone I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVBB 1213 Applied Secondary Trombone II (Y) 1 cr.

Prerequisite: MVBB 1213. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVBA 2223 Applied Secondary Trombone III (Y) 1 cr.

Prerequisite: MVBB 1213. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVBB 2223 Applied Secondary Trombone IV (Y) 1 cr.

Prerequisite: MVBA 2223. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBA 1413 Applied Major Trombone I (Y) 3 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVBB 1413 Applied Major Trombone II (Y) 3 cr.

Prerequisite: MBVA 1413. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVBA 2423 Applied Major Trombone III (Y) 3 cr.

Prerequisite: MVBB 1413. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVBB 2423 Applied Major Trombone IV (Y) 3 cr.

Prerequisite: MVBA 2423. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVB — Music: Brasses
Trumpet**

MVBA 1011 Applied Preparatory Trumpet I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVBB 1011 Applied Preparatory Trumpet II (Y) 2 cr.

Prerequisite: MVBA 1011. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson per week.

MVBA 1311 Applied Principal Trumpet I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBB 1311 Applied Principal Trumpet II (Y) 2 cr.

Prerequisite: MVBA 1311. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBA 2321 Applied Principal Trumpet III (Y) 2 cr.

Prerequisite: MVBB 1311. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBB 2321 Applied Principal Trumpet IV (Y) 2 cr.

Prerequisite: MVBA 2321. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBA 1211 Applied Secondary Trumpet I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVBB 1211 Applied Secondary Trumpet II (Y) 1 cr.

Prerequisite: MVBA 1211. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVBA 2221 Applied Secondary Trumpet III (Y) 1 cr.

Prerequisite: MVBB 1211. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVBB 2221 Applied Secondary Trumpet IV (Y) 1 cr.

Prerequisite: MVBA 2221. This is the fourth semester of private lessons designed for students majoring in any area

of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBA 1411 Applied Major Trumpet I (Y) 3 cr.

Prerequisite: placement by audition before the entire full-time music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVBB 1411 Applied Major Trumpet II (Y) 3 cr.

Prerequisite: MVBA 1411. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVBA 2421 Applied Major Trumpet III (Y) 3 cr.

Prerequisite: MVBB 1411. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVBB 2421 Applied Major Trumpet IV (Y) 3 cr.

Prerequisite: MVBA 2421. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVB — Music: Brasses
Tuba**

MVBA 1015 Applied Preparatory Tuba I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVBB 1015 Applied Preparatory Tuba II (Y) 2 cr.

Prerequisite: MVBA 1015. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVBA 1315 Applied Principal Tuba I (Y) 2 cr.

Prerequisite: Placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBB 1315 Applied Principal Tuba II (Y) 2 cr.

Prerequisite: MVBA 1315. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBA 2325 Applied Principal Tuba III (Y) 2 cr.

Prerequisite: MVBB 1315. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBB 2325 Applied Principal Tuba IV (Y) 2 cr.

Prerequisite: MVBA 2325. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBA 1215 Applied Secondary Tuba I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVBB 1215 Applied Secondary Tuba II (Y) 1 cr.

Prerequisite: MVBA 1215. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVBA 2225 Applied Secondary Tuba III (Y) 1 cr.

Prerequisite: MVBB 1215. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVBB 2225 Applied Secondary Tuba IV (Y) 1 cr.

Prerequisite: MVBA 2225. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVBA 1415 Applied Major Tuba I (Y) 3 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVBB 1415 Applied Major Tuba II (Y) 3 cr.

Prerequisite: MVBA 1415. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVBA 2425 Applied Major Tuba III (Y) 3 cr.

Prerequisite: MVBB 1415. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVBB 2425 Applied Major Tuba IV (Y) 3 cr.

Prerequisite: MVBA 2425. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVS — Music: Strings
Viola**

MVSA 1012 Applied Preparatory Viola I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVSB 1012 Applied Preparatory Viola II (Y) 2 cr.

Prerequisite: MVSA 1012. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVSA 1312 Applied Principal Viola I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSB 1312 Applied Principal Viola II (Y) 2 cr.

Prerequisite: MVSA 1312. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSA 2322 Applied Principal Viola III (Y) 2 cr.

Prerequisite: MVSB 1312. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSB 2322 Applied Principal Viola IV (Y) 2 cr.

Prerequisite: MVSA 2322. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSA 1212 Applied Secondary Viola I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVSB 1212 Applied Secondary Viola II (Y) 1 cr.

Prerequisite: MVSA 1212. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVSA 2222 Applied Secondary Viola III (Y) 1 cr.

Prerequisite: MVSB 1212. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVSB 2222 Applied Secondary Viola IV (Y) 1 cr.

Prerequisite: MVSA 2222. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSA 1412 Applied Major Viola I (Y) 3 cr.

Prerequisite: placement by audition before the full-time music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVSB 1412 Applied Major Viola II (Y) 3 cr.

Prerequisite: MVSA 1412. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVSA 2422 Applied Major Viola III (Y) 3 cr.

Prerequisite: MVSB 1412. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVSB 2422 Applied Major Viola IV (Y) 3 cr.

Prerequisite: MVSA 2422. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVS — Music: Strings
Violin****MVSA 1011 Applied Preparatory Violin I (Y) 2 cr.**

Prerequisite: placement by audition before the music faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVSB 1011 Applied Preparatory Violin II (Y) 2 cr.

Prerequisite: MVSA 1011. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour lesson a week.

MVSA 1311 Applied Principal Violin I (Y) 2 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSB 1311 Applied Principal Violin II (Y) 2 cr.

Prerequisite: MVSA 1311. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSA 2321 Applied Principal Violin III (Y) 2 cr.

Prerequisite: MVSB 1311. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSB 2321 Applied Principal Violin IV (Y) 2 cr.

Prerequisite: MVSA 2321. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSA 1211 Applied Secondary Violin I (Y) 1 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVSB 1211 Applied Secondary Violin II (Y) 1 cr.

Prerequisite: MVSA 1211. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVSA 2221 Applied Secondary Violin III (Y) 1 cr.

Prerequisite: MVSB 1211. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVSB 2221 Applied Secondary Violin IV (Y) 1 cr.

Prerequisite: MVSA 2221. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVSA 1411 Applied Major Violin I (Y) 3 cr.

Prerequisite: placement by audition before the music faculty. This is the first semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVSB 1411 Applied Major Violin II (Y) 3 cr.

Prerequisite: MVSA 1411. This is the second semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVSA 2421 Applied Major Violin III (Y) 3 cr.

Prerequisite: MVSB 1411. This is the third semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

MVSB 2421 Applied Major Violin IV (Y) 3 cr.

Prerequisite: MVSA 2421. This is the fourth semester of private lessons designed for students majoring in performance. Two half-hour lessons a week.

**MVV — Music: Voice
Voice****MVVA 1011 Applied Preparatory Voice I (Y) 2 cr.**

Prerequisite: placement by audition before the voice faculty. Private lessons are designed for music majors whose background indicates a need for further preparation. One hour of diction included. One hour lesson a week.

MVVB 1011 Applied Preparatory Voice II (Y) 2 cr.

Prerequisite: MVVA 1011. This is the second semester of private lessons designed for music majors whose background indicates a need for further preparation. One hour of diction included. One hour lesson a week.

MVVA 1311 Applied Principal Voice I (Y) 2 cr.

Prerequisite: placement by audition before the voice faculty. This is the first semester of private lessons designed for the student majoring in any area of music except performance (e.g. music education, music therapy, etc.). One hour of diction included. One hour lesson a week.

MVVB 1311 Applied Principal Voice II (Y) 2 cr.

Prerequisite: MVVA 1311. This is the second semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). One hour of diction included. One hour lesson a week.

MVVA 2321 Applied Principal Voice III (Y) 2 cr.

Prerequisite: MVVB 1311. This is the third semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). One hour of diction included. One hour lesson a week.

MVVB 2321 Applied Principal Voice IV (Y) 2 cr.

Prerequisite: MVVA 2321. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). One hour of diction included. One hour lesson a week.

MVVA 1211 Applied Secondary Voice I (Y) 1 cr.

Prerequisite: placement by audition before the voice faculty. This is the first semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVVB 1211 Applied Secondary Voice II (Y) 1 cr.

Prerequisite: MVVA 1211. This is the second semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVVA 2221 Applied Secondary Voice III (Y) 1 cr.

Prerequisite: MVVB 1211. This is the third semester of private lessons designed for music majors needing to gain proficiency on an instrument other than their principal or major. One half-hour lesson a week.

MVVB 2221 Applied Secondary Voice IV (Y) 1 cr.

Prerequisite: MVVA 2221. This is the fourth semester of private lessons designed for students majoring in any area of music except performance (e.g. music education, music therapy, etc.). Two half-hour lessons a week.

MVVA 1411 Applied Major Voice I (Y) 3 cr.

Prerequisite: placement by audition before the voice faculty. This is the first semester of private lessons designed for students majoring in performance. One hour of diction included. Two half-hour lessons a week.

MVVB 1411 Applied Major Voice II (Y) 3 cr.

Prerequisite: MVVA 1411. This is the second semester of private lessons designed for students majoring in performance. One hour of diction included. Two half-hour lessons a week.

MVVA 2421 Applied Major Voice III (Y) 3 cr.

Prerequisite: MVVB 1411. This is the third semester of private lessons designed for students majoring in performance. One hour of diction included. Two half-hour lessons a week.

MVVB 2421 Applied Major Voice IV (Y) 3 cr.

Prerequisite: MVVA 2421. This is the fourth semester of private lessons designed for students majoring in performance. One hour of diction included. Two half-hour lessons a week.

NUR — Nursing Practice and Theory

NUR 1000C Transitional Nursing Process I 9 cr.

Prerequisites: BSC 2085C, BSC 2086C, MCB 2013C, ENC 1101, PSY 1012, DEP 2004, MAC 1102 or any higher level mathematics course, and any one of the following: SYG 2000, humanities (refer to A.S. degree General Education Requirements). This course, designed for and limited to Florida licensed practical nurses, encompasses a review of fundamental concepts of health needs, asepsis, dosage calculation and medication administration. The course includes basic principles of mental health, communication and family nursing with emphasis placed on resocialization of the nurse's role within the framework of the nursing process. This course utilizes simulated and actual nursing care work experiences for application of theoretical concepts. Students receive evaluation in selected clinical skills in the campus nursing laboratory. Twelve contact hours: six lecture hours, six laboratory hours. (Students will receive learning experiences on campus and in a clinical facility.)

NUR 1021C Nursing Process I — Fundamentals of Nursing 10 cr.

Prerequisite: BSC 2086C. Nursing Process I is a study of the principles and techniques that form the foundation for nursing care. The nursing process — assessing, analyzing, planning, implementing and evaluating — serves as the framework for the application of content with emphasis on nursing interventions and adaptations for specific age groups, particularly elderly clients, to meet the basic needs of man in health maintenance. Content and experiences focus on the geriatric client, observations, communication, the interpersonal process, recording, hygienic practices, administration of medications, asepsis, nutrition, elimination, fluid balance and oxygenation. The course introduces current trends and legal implications of nursing. Fifteen contact hours: five lecture hours, ten laboratory hours. (Students will receive learning experiences on campus and in a clinical facility.) (CBE)

NUR 1212C Nursing Process II — Medical Surgical Nursing Care of the Adult Client I 10 cr.

Prerequisites: NUR 1021C and MCB 2013C. With Nursing Process I as a foundation, this course moves from the basic client needs in health maintenance to common health problems which require new knowledge and adaptation and includes study of the physical and psychological needs of clients. The course places emphasis on the essential knowledge, understanding and skills necessary to the nursing care of adult clients with medical and surgical conditions and upon the interpersonal process. This course continues the five steps of the nursing process with a higher level of performance expected of students. Sixteen contact hours: four lecture hours, twelve laboratory hours. (Students will receive learning experiences on campus and in a clinical facility.)

NUR 1703C Transitional Nursing Process II 9 cr.

Prerequisite: NUR 1000C. Corequisites: may be enrolled in any course listed under A.S. degree humanities or SYG 2000. A continuation of Transitional Nursing Process I, this

course, designed for and limited to Florida licensed practical nurses, introduces students to the use of the nursing process in their newly developing roles when interacting with adult and child clients having interruptions in their physical and psychological health. The course emphasizes demonstration of knowledge, comprehension, application and analysis of the nursing process and includes drug and diet therapy. The course utilizes simulated and actual nursing experiences related to theoretical concepts and evaluates clinical skills in the campus nursing laboratory. Twelve contact hours: six lecture hours, six laboratory hours (students will receive learning experiences on campus and in a clinical facility).

NUR 2313C Nursing Process IIIB — Nursing Care of Children 6 cr.

Prerequisites: NUR 1212C and DEP 2004. Corequisite: NUR 2420C. With Nursing Process I and II as a basis, Nursing Process IIIB encompasses the study of physical and psychological states of children from infancy through adolescence. This course uses the wellness to illness approach with a focus on the child as a member of a family. Pediatric nursing supports the belief that children, by nature of their growth and development, and physical and emotional differences, have needs in health and illness different from those of adults. Utilizing the nursing process students are able to apply knowledge and skills in solving common recurring health problems. Further, students learn to adapt principles of growth and development to the care of children. Nine and one-half contact hours (lecture/discussion). (Students will receive learning experiences on campus and in a clinical facility).

NUR 2420C Nursing Process IIIA — Nursing Care of the Child Bearing Family 6 cr.

Prerequisites: NUR 1212C and DEP 2004. Corequisite: NUR 2313C. With Nursing Process I and II as a basis, Nursing Process IIIA encompasses the child bearing cycle as an adaptation of the state of wellness and continues through the neonatal stage of development. Nursing Care of the Child Bearing Family focuses on nursing interventions with families who are experiencing the stresses of the child bearing period. The nursing care of the child bearing family given by student nurses relies on the belief that special needs and problems occurring at designated points in the growth cycle are outgrowths of the developmental level attained by the individual. This course emphasizes utilizing nursing and the interpersonal process to identify and meet the physiological, sociocultural, and psychological needs of the child bearing family. This course also covers the uncomplicated and the complicated pregnancy, the focus being on the common recurring problems of this period. Laboratory experiences occur in community hospitals and other health agencies. Nine and one-half contact hours (lecture/discussion).

NUR 2520C Nursing Process IVB — Psychiatric Nursing 3 cr.

Prerequisites: NUR 2420C and NUR 2313C. Corequisite: NUR 2730C. This four-week course builds on the mental health concepts presented in each of the previous nursing courses. In varied clinical settings, this course emphasizes

the use of the nursing process in the care of adolescent and adult clients with deviant patterns of behavior. (Students will receive learning experiences on campus and in a clinical facility.) Five contact hours (over a four-week period) (lecture/discussion).

NUR 2730C Nursing Process IVA — Medical-Surgical Nursing Care of the Adult Client II 9 cr.

Prerequisites: NUR 2420C and NUR 2313C. Corequisite: NUR 2520C. This 11-week course is a continuation of the study of commonly recurring health problems of clients from the young adult years through senescence with focus on the illness side of the continuum. The nursing process will serve as the basis for nursing care. Students will give nursing care to clients with medical-surgical disorders. Learning experiences will provide opportunities to utilize previously acquired knowledge and skills in giving nursing care and functioning as a team member. Recognizing the special status and needs of beginning associate degree nurse practitioners, this course includes a transitional clinical experience. Twenty contact hours: four lecture hours, sixteen laboratory hours (over an 11-week period). (Students will receive learning experiences on campus and in a clinical facility).

OCB — Oceanography: Biological

OCB 2003C Fundamentals of Marine Biology (Y) 4 cr.

Students will benefit by taking Principles of Biology I and/or high school chemistry, physics or Introduction to General Chemistry prior to enrolling in this course. This course consists of a comprehensive survey of marine ecosystems with emphasis on the local flora and fauna. Laboratory includes collection and identification of marine organisms. Six contact hours: three lecture hours, three laboratory hours.

OCE — Oceanography: General

OCE 2001 Survey of Oceanography (Y) 3 cr.

Prerequisite: MAT 0025. Corequisites: MAC 1140 and OCE 2001L. Students will benefit by taking high school chemistry and/or physics prior to enrolling in this course. This course consists of an introductory, comprehensive treatment of physical, chemical and geological aspects of our oceans. Three contact hours.

OCE 2001L Oceanography Laboratory (Y) 1 cr.

Corequisite: OCE 2001. This is a laboratory course intended to supplement Survey of Oceanography and includes field trips for application of oceanographic techniques. Three contact hours (laboratory).

ORH — Ornamental Horticulture

ORH 1808 Exterior and Interior Landscaping 3 cr.

This course provides students with a basic overview of exterior and interior landscaping. Topics include site analysis, selection of plants, lighting requirements and maintenance. Differences between commercial and residential adaptations will be explored. Special emphasis will be given to the North Florida growing season. Three contact hours.

ORI — Oral Interpretation

ORI 2000 Oral Interpretation (Y) 3 cr.

Prerequisite: ENC 1101 with a grade of "C" or better. This course consists of critical analysis and appreciation of literature from both the emotional and the intellectual viewpoints. Designed to enhance students' appreciation of words, ideas and beauty in all forms of literature, this course involves the discussion and application of the techniques of oral reading of poetry, prose and drama. This course serves to meet the Gordon Rule writing requirement. Three contact hours.

OST — Office Systems Technology

OST 1051 Personal Preparation for Business Careers 1 cr.

This course is designed to provide instructions to students to receive employability skills needed to help secure a job with emphasis on job search skills, resume writing and interviewing success. One contact hour.

OST 1100 Keyboarding/Introduction to Word Processing (Y) 3 cr.

The major objectives of the course, designed for students who have little or no typewriting/keyboarding experience, are to learn the keyboard and to develop correct keyboarding techniques. The course introduces basic word processing concepts applied to report centered texts, letters and memos. Three contact hours. (CBE)

OST 1108 Keyboard Skill/Speed Building (Y) 3 cr.

Prerequisite: OST 1100 or previous keyboarding experience. Computerized diagnostic tests will be used to identify weaknesses in keying speed and accuracy. Speed and accuracy studies will then be designed to build individual keyboarding skills. This course is designed for students who have previous keyboarding experience. Three contact hours.

OST 1141 Basic Computer Keyboarding 1 cr.

This course is designed to give academic students the skills necessary to adequately manipulate a computer keyboard. It will provide basic knowledge of touch keyboarding (typing on a computer). Students requiring higher levels of proficiency in keyboarding are encouraged to enroll in other courses more suited to their needs. Credit cannot be earned for both this course and OST 1100. One contact hour.

OST 1145 Data Entry Applications 3 cr.

Prerequisite: OST 1100 or satisfactory score (20 wpm) on a keyboarding test. This course provides extensive practice in keying alphabetic, numeric and alphanumeric data. It is designed to build keying skill and to build skill in various data entry applications. Emphasis is placed on accurate inputting of data, whatever the application. Three contact hours. (CBE)

OST 1273 Effective Notetaking 1 cr.

This course is designed to provide students with strategies for improving listening skills, enhancing learning and recall through effective notetaking and applying techniques to improve materials organization. One contact hour.

OST 1324 Business Mathematics Using Calculators (Y) 3 cr.

Prerequisite: satisfactory score on the placement test. This course consists of a mathematical treatment of financial problems arising in modern businesses. Fundamental mathematical processes are reviewed using electronic calculators. The course covers percentages, simple and compound interest, inventories, depreciation, payroll, commissions, taxes and other business-related topics. Spreadsheet applications are introduced. Three contact hours. (CBE)

OST 1355 Introduction to Information and Records Management 2 cr.

This course gives students an overview of records used in business, as well as various configurations of record-keeping systems. Students are made aware of how and why information of various types are stored on several kinds of media and how an information system functions. Career opportunities are presented. Emphasis is placed on international filing rules. Two contact hours.

OST 1384 Introduction to Customer Service 3 cr.

This course is an introduction to the basics of customer service technology. Emphasis is on enhancing customer relation skills, building rapport with customers and improving communication and negotiating skills. Students will learn how to respond to customer requirements and to efficiently handle difficult situations. Three contact hours.

OST 1401 Fundamental Support Systems and Procedures 3 cr.

Prerequisite: OST 1100 or previous keyboarding experience. This course is an introduction to office systems as the integration of people, procedures, equipment and the environment. It provides a study of the information processing cycle utilizing both manual and electronic procedures and stresses the development of human relations skills for survival in today's office. Three contact hours.

OST 1464 Computers in the Medical Office 3 cr.

Prerequisite: OST 1100 or previous keyboarding experience. This course is designed to provide students the skills required to manage patient, procedure and insurance information via the use of database software in a medical office setting. Three contact hours.

OST 1581 Professional Development in the Work Environment 3 cr.

This course is designed to provide techniques for the development of people skills essential for job success. Topics include developing a professional image, ethics, time management, human relations and communications skills, organizational dynamics, employability skills, conflict management skills and money management. Three contact hours.

OST 1601 Fundamentals of Business Communications 3 cr.

This course is designed to provide the foundation for effective business communications. It will focus on the fundamentals of English and the established standards of

usage while emphasizing their importance in the business world. Students will learn listening and verbal skills, and how to format, proofread and edit documents. Three contact hours. (CBE)

OST 1621 Legal Transcription 3 cr.

Prerequisite: OST 2771 or word processing skills. This is a specialized terminology and transcription course to develop proficiency in the skill of transcribing accurately all types of legal dictation with emphasis on accuracy, legal vocabulary and document formatting. NOTE: Students whose keyboarding speed is less than 40 words per minute will have difficulty keeping up and may not perform well on tests. Three contact hours.

OST 2335 Applied Business Communications (Y) 3 cr.

Prerequisite: OST 1601 or ENC 1101. This course is designed to teach the communication skills necessary to speak and write clearly in a business environment. Students will compose business correspondence, develop and give an oral presentation, and develop effective verbal and nonverbal communication and listening skills. Three contact hours.

OST 2501 Office Systems Management (Y) 3 cr.

This course applies management principles to planning and controlling office systems. Emphasis is given to organization of office resources, leadership and motivation of office personnel, office environment and design of business information systems. Three contact hours.

OST 2602 Machine Transcription 3 cr.

Prerequisite: OST 2771 or word processing experience. This course provides a simulation of office tasks to aid students in attaining competency in transcribing from machine dictation, in proper and accurate use of language arts, in formatting office papers and in the effective use of current office technology. NOTE: Students whose keyboarding speed is less than 40 words per minute will have difficulty keeping up and may not perform well on tests. Three contact hours.

OST 2771 Word Processing for Windows I (Y) 4 cr.

Prerequisite: OST 1100 or previous keyboarding experience. This course includes concepts of word processing and text editing applications. It includes creating, saving, revising, editing, printing, and using special features in basic word processing files in a Windows environment. NOTE: Students without keyboarding skills may have difficulty completing assignments, and may not perform well on tests. Four contact hours. (CBE)

OST 2773 Word Processing for Windows II (Y) 4 cr.

Prerequisite: OST 2771. This course is designed to teach students how to produce complex documents using advanced word processing functions in a Windows environment. Four contact hours.

OST 2821 Desktop Publishing Using Word Processing 3 cr.

Prerequisite: working knowledge of microcomputers and experience with word processing in a Windows environment.

This course is an introduction to desktop publishing using current word processing software. Projects and hands-on practice appropriate to contemporary business needs will be used. Foundation page design skills will be introduced to familiarize students with the concepts of page composition and topography including different type styles and sizes and page formatting techniques. Four contact hours: three lecture hours, one laboratory hour.

OST 2930 Selected Topics in Office Systems Technology 3 cr.

Prerequisite: depends upon topic. Corequisite: depends upon topic. The open-topic format of this course provides an opportunity to address various combinations of topics related to OST curriculum or business industry need. This course may be repeated for credit. Four contact hours: three lecture hours, one laboratory hour.

PCB — Process Biology (Cell/Molecular/Ecology/Genetics/Physiology)

PCB 2033 General Ecology (Y) 3 cr.

Prerequisite: successful completion of a biological or physical science course. This course is an introduction to ecology, principles of ecology with applications to environmental issues and discussion of major terrestrial/aquatic ecosystems. Three contact hours. (CBE)

PEL — Physical Education Acts (General) — Object Centered, Land

PEL 1121 Beginning Golf 1 cr.

This beginning course teaches the basic golf swing and its application to starter clubs. The course also includes golfing etiquette, history, rules and simple strategy. Two contact hours (activity).

PEL 1122 Intermediate Golf 1 cr.

Prerequisite: PEL 1121 or consent of instructor. This intermediate course will be an extension of the beginning course teaching in greater detail in relation to the golf swing, along with a review of etiquette and rules. More focus will be placed on strategy and appropriate sessions. Two contact hours (activity).

PEL 1211 Softball 1 cr.

This course, designed for students who wish to broaden their knowledge of softball and improve their game skills, emphasizes the history of the game, rules, fundamentals, game skills and strategies. Two contact hours (activity).

PEL 1321 Beginning Volleyball 1 cr.

This course teaches the fundamental skills, strategy and knowledge necessary for game and tournament participation. Two contact hours (activity).

PEL 1341 Beginning Tennis 1 cr.

This introductory course covers the history, scoring, game strategy and basic skills, which include footwork, forehand and backhand drives, serve, volley and lob. Two contact hours (activity).

PEL 1342 Intermediate Tennis 1 cr.

Students will benefit by taking Beginning Tennis prior to enrolling in this course. This course is designed for students who have acquired the basic skills and strategy of tennis and desire to improve their tennis game. Two contact hours (activity).

PEL 1346 Beginning Badminton 1 cr.

This course covers the history, scoring, basic skills and game strategy of badminton. It also consists of appropriate class tournaments. Two contact hours (activity).

PEL 1622 Advanced Basketball 1 cr.

This course, designed to teach skills in basketball, includes instruction in offensive and defensive fundamentals, strategy and rules as well as application in game situations. Two contact hours (activity).

PEL 2322 Advanced Volleyball 1 cr.

This course introduces power volleyball techniques, tactics and strategy to students interested in either the competitive or recreational aspect of the game. Two contact hours (activity).

PEM — Physical Education Acts (General) — Performance Centered, Land

PEM 1101 Physical Conditioning 1 cr.

This course, designed to assist men and women in becoming stronger, more flexible, better coordinated and more graceful, includes a program of planned activities such as selected exercises, use of weight equipment and aerobic activities. Two contact hours (activity).

PEM 1109 Circuit Training 1 cr.

This course consists of a planned fitness training program to increase muscular strength and endurance through a planned series of exercises. Two contact hours (activity).

PEM 1320 Beginning Rock Climbing (Y) 2 cr.

This course is designed to expose students to the activity of top-roped rock climbing. The emphasis will be on the selection of appropriate gear and sites, the safe set-up and conducting of a climbing/rappelling experience, and the self-esteem and transferable life skills acquired from effective participation in a team-oriented outdoor adventure pursuit. One four-day field trip is included. A cost for the activity will be assessed. Three contact hours: one and one-half lecture hours, one and one-half other hours (activity).

PEM 1131 Strength Training (Nautilus/Universal) (Y) 2 cr.

Recommended prerequisite or corequisite: HLP 1081. This course is designed to provide basic strength training principles and individualized programs with emphasis on muscular strength and endurance. It is recommended, and in some cases may be required, that students obtain medical approval prior to participation in the course. Three contact hours: one and one-half lecture hours, one and one-half other hours (activity).

PEM 1146 Beginning Jogging (Y) 2 cr.

Recommended prerequisite or corequisite: HLP 1081. This course introduces basic concerns of beginning joggers such as safety factors, warm-up and cool-down, developing individual style, equipment selection, training principles and injury prevention, and precautions. It is recommended, and in some cases may be required, that students obtain medical approval prior to participation in the course. Three contact hours: one and a half lecture hours, one and one-half other hour (activity).

PEM 1171 Aerobics to Music (Y) 2 cr.

Recommended prerequisite or corequisite: HLP 1081. This course is designed to introduce techniques for improving aerobic capacity exercises with a combination of exercise and dance set to music. Emphasis is more on movement and exercise rather than skill. It is recommended, and in some cases may be required, that students obtain medical approval prior to participation in the course. Three contact hours: one and one-half lecture hours, one and one-half activity hours.

PEM 1301 Track and Field Events 1 cr.

This course includes an introduction to the basic skills and knowledge involved in sprinting, distance running, relays and hurdling. Two contact hours (activity).

PEM 1351 Cycling (Y) 2 cr.

This course introduces basic concerns of cyclists such as equipment/clothing, basic operating skills, traffic, cycling laws/safety, fitness training principles and cycling for commuting, touring, racing and fitness. Students must furnish their own bike. It is recommended and in some cases may be required, that students obtain medical approval prior to participation in the course. Students will be responsible for planning and participating in a two-day (Saturday-Sunday) cycle tour, using a sag wagon to transport food and camping gear. A cost for the trip will be assessed. Three contact hours: one and one-half lecture hours, one and one-half activity hours.

**PEN — Physical Education Acts
(General) — Water, Snow, Ice**

PEN 1251 Adventure Canoeing (Y) 2 cr.

Prerequisite: basic swimming skills. This course is a coeducational course which provides the opportunity for students to acquire the knowledge and skills for safe handling and maneuvering of a canoe both solo and tandem. Canoe expeditions are included. A cost for the expeditions will be assessed. Three contact hours: one and one-half lecture hour, one and one-half activity hour.

**PEO — Physical Education Acts
(Professional) — Object Centered, Land**

PEO 2003 Sports Officiating (Y) 3 cr.

This course, designed to acquaint students with the techniques of officiating team, individual and dual sports, and covers baseball/softball, basketball, track and field, volleyball, tennis and swimming. Three contact hours.

PET — Physical Education Theory

PET 2000 Introduction to Physical Education (Y) 3 cr.

This course, designed for students interested in physical education as a profession, examines the place, function and contribution of physical education within the total educational program. It also includes consideration of the history, philosophy and issues of physical education. Three contact hours.

PET 2210 Sports Psychology (Y) 3 cr.

This course develops an understanding of the mental aspects of sport performance and learning skills that can be used to enhance sport performance. Three contact hours.

PET 2760 Theory and Practice of Coaching (Y) 3 cr.

This course provides an understanding and background in the fundamentals of coaching. Students completing this course should understand the key concepts and techniques associated with coaching their sport and be able to not only converse knowledgeably about their sport but feel comfortable with a teaching/coaching assignment in their area. Three contact hours.

PGY — Photography

PGY 2401C Photography I

See page 178 of College catalog.

PGY 2410C Photography II

See page 178 of College catalog.

PGY 2104C Creative Photography

See page 178 of College catalog.

PHI — Philosophy

**PHI 1103 Practical Logic: A Course in Critical
and Creative Thinking (Y) 3 cr.**

This course is designed to develop fundamental skills in critical and creative thinking. It stresses the practical application of logical concepts such as the ability to recognize, evaluate and analyze the thinking of others by analyzing language, evaluating evidence and detecting and avoiding inaccurate or fallacious thinking, and the ability to solve problems, make decisions and construct arguments. The course, thus, promotes clear and creative thinking. Three contact hours.

PHI 2010 Introduction to Philosophy (Y) 3 cr.

Prerequisite: ENC 1101 or satisfactory score on the placement test. This course consists of an introduction to philosophical issues organized for the most part on a historical basis. Students encounter some of the perennial problems of philosophy and the types of answers that have been suggested by studying the thought of selected philosophers. This course includes reading and writing competencies. Three contact hours.

PHI 2100 Introduction to Logic (Y) 3 cr.

This course provides a general introduction to logic that combines approximately equal emphasis on the uses and misuses of language, deductive reasoning and inductive

reasoning. Some primary objectives are to provide students with an appreciation of the extent and limitations of human knowledge and with tools for valid reasoning and critical thinking. Three contact hours.

PHI 2600 Moral and Political Philosophy (Y) 3 cr.

Prerequisite: ENC 1101 or satisfactory score on the placement test. This course is a survey of the efforts made by philosophers to comprehend that portion of experience that is concerned with human values and obligations. The course consists primarily of the analysis of selected writings in which philosophers attempt to do such things as characterize the most satisfactory life, specify the basis of moral responsibility, determine the test ability of moral judgments and assess the proper relation between the individual and the state. This course includes reading and writing competencies. Three contact hours.

PHT — Physical Therapy

PHT 1000C Introduction to Physical Therapy 2 cr.

Prerequisites: BSC 2085C, BSC 2086C, MAC 1102, PHY 1020 and admission to the PTA program. Corequisites: PHT 1120C and PHT 1200C. This course introduces students to the health care profession in general and in particular, the physical therapy profession including its history, current status, philosophy and goals. The role and responsibilities of the physical therapist assistant are explored with regard to: the health-care team, organizational structure, cultural diversity, legal and ethical issues, documentation and communication. A laboratory component provides students an opportunity to apply and practice computer skills, experience first hand the value of cultural diversity, experience psychosocial aspects of disability and role play in staged real life professional situations. Three contact hours: two lecture hours, one laboratory hour.

PHT 1120C Functional Anatomy and Kinesiology 5 cr.

Prerequisites: BSC 2085C, BSC 2086C, MAC 1102, PHY 1020 and admission to PTA program. Corequisites: PHT 1000C and PHT 1200. This course presents an in-depth study of the structure and function of the musculoskeletal system. Attention is focused on a knowledge and understanding of the mechanical aspects of human motion. Kinesiology, as it relates to the function of the musculoskeletal system during therapeutic exercise, functional movement patterns and locomotion is emphasized. Manual muscle testing and goniometry are introduced and examined. A laboratory component provides students an opportunity to apply and practice concepts presented in the lecture segment of this course. Manual muscle testing, goniometry, palpation and observational and analysis skills with regards to posture, functional movement patterns of the trunk and extremities, therapeutic exercise and locomotion are addressed. Eight contact hours: two lecture hours, six laboratory hours.

PHT 1200C Basic Patient Care 7 cr.

Prerequisites: BSC 2085C, BSC 2086C, MAC 1102, PHT 1020 and admission to the PTA program. Corequisites: PHT 1000C and PHT 1120C. This course introduces basic

patient care and handling techniques and therapeutic modalities. Fundamental skills that are applicable to a wide range of physical therapy treatment methods are covered. Theory, physiological effects, indications, contraindications and application of various therapeutic modalities are presented in conjunction with selected diseases and conditions. A laboratory component provides students an opportunity to apply and practice concepts presented in the lecture segment of this course. Emphasis is focused on manual dexterity and following proper procedure in carrying out patient care. Patient safety and comfort are stressed with each skill addressed. Eleven contact hours: three lecture hours, eight laboratory hours.

PHT 1210C Physical Therapy Principles and Procedures 4 cr.

Prerequisites: PHT 1000C, PHT 1120C and PHT 1200C. Corequisites: PHT 2220C and PHT 2252C. The course examines the principles of physical therapy treatment procedures and modalities used in patient care. Electrotherapy, including electrical stimulation, iontophoresis and biofeedback is covered thoroughly. Theory, physiological effects, indications, contraindication and application of electrotherapeutic modalities in conjunction with selected diseases and conditions are presented. A laboratory component provides students an opportunity to apply and practice concepts presented in the lecture segment of this course. The proper procedure utilized in administering each modality and technique is addressed. Patient safety and comfort are stressed with each skill presented. Six contact hours: two lecture hours, four laboratory hours.

PHT 2220C Therapeutic Exercise in Physical Therapy 5 cr.

Prerequisites: PHT 1000C, PHT 1120C and PHT 1200C. Corequisites: PHT 1210C and PHT 2252C. This course provides an overview of the biomechanical, neurophysiological, and cardiovascular basis for the application of therapeutic exercise. The rationale for and functional basis of therapeutic exercise is correlated with selected diseases and conditions. Range of motion, strengthening, power, endurance, stability, flexibility, pulmonary and aerobic exercise are included. A laboratory component provides students an opportunity to apply and practice concepts presented in the lecture segment of this course. The ability to perform each type of exercise correctly and instruct others will be examined. Individual response to exercise will be monitored. Attention will be given to manual dexterity and the correct use and application of selected techniques and equipment. Seven contact hours: three lecture hours, four laboratory hours.

PHT 2224C Disabilities and Therapeutic Procedures 2 cr.

Prerequisites: PHT 2220C, PHT 1210C and PHT 2252C. Corequisites: PHT 2801L, PHT 2253C and PHT 2931. This course is devoted to the study of disorders which are not directly related to orthopedics or neurology. The disabilities associated with each disorder are examined. Emphasis is on the etiology, pathology, clinical picture and physical therapy treatment of the diseases and conditions studied.

Disorders covered include pulmonary, cardiovascular, burn, chronic illness, geriatric, medical, surgical, obstetric/gynecological and mental. A laboratory component provides students an opportunity to apply and practice concepts presented in the lecture segment of this course. Various modalities, techniques and protocols used in the treatment of diseases and disorders presented are covered. Three contact hours: two lecture hours, one laboratory hour.

PHT 2252C Orthopedic Disabilities and Treatment 3 cr.

Prerequisites: PHT 1000C, PHT 1120C and PHT 1200C. Corequisites: PHT 1210C and PHT 2220C. This course provides a basic knowledge of selected orthopedic disorders and their associated disabilities encountered in physical therapy practice. Emphasis is on the etiology, pathology, clinical picture and physical therapy treatment of diseases and conditions studied. A laboratory component provides students an opportunity to apply and practice concepts presented in the lecture segment of this course. Various modalities, techniques and protocols used in the rehabilitation of orthopedic diseases and disorders are covered. Five contact hours: three lecture hours, two laboratory hours.

PHT 2253C Neurological Disabilities and Treatment 4 cr.

Prerequisites: PHT 2220C, PHT 1210C and PHT 2252C. Corequisites: PHT 2801L, PHT 2224C and PHT 2931. This course is devoted to the study of the nervous system and selected pediatric and adult neurological disorders, coupled with their associated disabilities encountered in physical therapy practice. Emphasis is on the etiology, pathology, clinical picture and physical therapy treatment of diseases and conditions studied. A laboratory component provides students an opportunity to apply and practice concepts presented in the lecture segment of this course. Various approaches and techniques used in the rehabilitation of neurological diseases and disorders are covered. Six contact hours: two lecture hours, four laboratory hours.

PHT 2801L Physical Therapy Clinical Practice I 4 cr.

Prerequisites: PHT 2220C, PHT 1210C and PHT 2252C. Corequisites: PHT 2253C, PHT 2224C and PHT 2931. This course introduces students to basic level physical therapy techniques in the clinical setting. Working under the close supervision of a licensed physical therapist, students begin to correlate didactic and laboratory background learned in previous course work with actual patient care. Students will be assigned to various agencies in the Northeast Florida Area that provide physical therapy services. Eleven contact hours (40 hours per week for 40 weeks).

PHT 2810L Physical Therapy Clinical Practice II 6 cr.

Prerequisites: PHT 2801L, PHT 2253C, PHT 2224C and PHT 2931. Corequisite: PHT 2820L. This course allows students to work with intermediate level physical therapy techniques in the clinical setting. Working under the supervision of a licensed physical therapist, students begin to utilize problem solving skills in the execution of patient care

plans. Students will be assigned to various agencies in the Northeast Florida area that provide physical therapy services. Sixteen contact hours (40 hours per week for 6 weeks).

PHT 2820L Physical Therapy Clinical Practice III 6 cr.

Prerequisites: PHT 2801L, PHT 2253C, PHT 2224C and PHT 2931. Corequisite: PHT 2810L. This course provides the student an opportunity to work with advanced level physical therapy techniques in the clinical setting. Working under the supervision of a licensed physical therapist, students develop critical thinking skills and further expand their problem solving abilities in the execution of patient care plans. Students will be assigned to various agencies in the Northeast Florida area that provide physical therapy services. Sixteen contact hours (40 hours per week for 6 weeks).

PHT 2931 Trends in Physical Therapy 2 cr.

Prerequisites: PHT 2220C, PHT 1210C and PHT 2252C. Corequisites: PHT 2801L, PHT 2253C and PHT 2224C. This is a seminar-style course examining the current trends impacting the profession of physical therapy as well as projecting future directions. The role of the professional team, cultural diversity, legal and ethical issues will be reexamined and explored more fully. In addition, interpersonal skills, employment techniques and licensing procedures will be addressed. Two contact hours.

PHY — Physics

PHY 1020 Physics for Liberal Arts (Y) 3 cr.

Corequisite: MAT 0025 or equivalent. This course is a general education course for non-science students and not for those who are planning to major in physics or other sciences. It is a survey of the physical environment as applied to mechanics, electricity and magnetism, and modern physics. Three contact hours.

PHY 2048C Physics I With Calculus (Y) 5 cr.

Prerequisite: MAC 2311. Corequisite: MAC 2312. This course, designed for students majoring in physics, chemistry and engineering, includes mechanics, conservation principles, rotational and harmonic motions, heat, thermodynamics and waves. Laboratory work will illustrate important principles and develop techniques. Seven contact hours: four lecture hours, three laboratory hours.

PHY 2049C Physics II With Calculus (Y) 5 cr.

Prerequisite: PHY 2048C. Corequisite: MAC 2313. This course, a continuation of Physics I With Calculus, includes electricity, magnetism, light and some areas of modern physics. Laboratory work is similar to and a continuation of the laboratory in Physics I With Calculus. Seven contact hours: four lecture hours, three laboratory hours.

PHY 2053C General Physics I (Y) 4 cr.

Prerequisites: MAC 1140 and MAC 1114 or MAC 2311 with a grade of "C" or better. The course, designed for those students who are majoring in pre-med, physical therapy, pre-optometry, pre-dental, pre-veterinary, biological sciences, technology and geology, stresses problem-solving abilities. Subject matter includes mechanics, heat and thermodynamics. Six contact hours: three lecture hours, three laboratory hours.

PHY 2054C General Physics II (Y) 4 cr.

Prerequisite: PHY 2053C. This course, a continuation of General Physics I, includes electricity, magnetism, light, waves (sound, light, and so forth) and some areas of modern physics. Laboratory work is similar to and a continuation of the laboratory in General Physics I. Six contact hours: three lecture hours, three laboratory hours.

PHY 2101 Modern Physics (Y) 3 cr.

Prerequisite: PHY 2049C. This course, designed for students majoring in physics, chemistry and engineering, includes special relativity, atomic spectra, quantum mechanics, atomic and molecular structures, introductory solid state, nuclear physics and particle physics. Three contact hours.

PHZ — Physics**PHZ 2113 Mathematical Physics (Y) 3 cr.**

Prerequisites: PHY 2048C and PHY 2049C. This course is designed for students majoring in physics, chemistry, engineering or mathematics. It focuses on mathematical methods applied to physical systems. Topics include infinite series, integrals, transforms, vectors, orthogonal functions and differential equations. Three contact hours.

PLA — Para Legal Assistant**PLA 1003 Introduction to Legal Assisting (Y) 3 cr.**

This course provides an overview of the purpose and training of legal assistants. It examines the roles of the attorney and the legal assistant and the professional and ethical standards of practice applicable to both. The course briefly surveys the fields of law in which legal assistants work and the Florida and federal court systems. Three contact hours.

PLA 1080 Legal Interviewing and Communicating 3 cr.

Corequisite: PLA 1003. This course is designed to sharpen oral communication skills. Students receive training in interpersonal communication and interview techniques. Students learn to plan interviews and use interview checklists, as well as to listen effectively. Role playing and videotape are used to assist in the development of verbal skills. Three contact hours.

PLA 1104 Legal Research and Writing I 3 cr.

Prerequisite: PLA 1003. This course provides an understanding of various components of a law library and emphasizes research skills through the use of digests, encyclopedias, reporter systems, codes, Shepards, ALR and other research tools. It also includes basic instruction and practice in legal writing and analysis. Three contact hours.

PLA 1303 Criminal Law and Procedure for Legal Assistants 3 cr.

Prerequisite: PLA 1003. This course is designed for legal assistants who want to work exclusively in criminal law and includes the sources and philosophy of criminal law, the organization of law enforcement, and substantive criminal law, rules and procedures, while emphasizing the drafting of legal documents. Three contact hours.

PLA 2114 Legal Research and Writing II 3 cr.

Prerequisites: grade of "C" or better in ENC 1101 and PLA 1104. This course is a continuation of Legal Research and Writing I and is intended to familiarize both practicing and potential legal assistants with the problems and procedures in legal research and writing. Students learn to prepare various legal documents, including case briefs, legal memoranda and pleadings. Three contact hours.

PLA 2203 Litigation 3 cr.

Prerequisite: PLA 1003. This course covers the process of civil and criminal litigation. It defines basic principles of pre-trial procedures and includes a survey of courts and their jurisdiction, investigation of facts, settlement of lawsuits, judgments and post-trial considerations. The emphasis is on drafting legal documents in each of these areas. Three contact hours.

PLA 2236 Alternative Dispute Resolution 3 cr.

Prerequisites: PLA 1003, PLA 2273 and BUL 2130. This course will focus on alternative dispute resolution techniques as a way of resolving legal conflicts. Negotiation, arbitration and mediation will be studied with emphasis on mediation due to its extensive application in the U.S. and particularly Florida. Three contact hours.

PLA 2263 Evidence for the Legal Assistant 1 cr.

Prerequisite: PLA 1003. Corequisites: PLA 2273 and PLA 1104. This course will focus on the practical application of the rules of evidence. Both federal rules of evidence and Florida rules of evidence will be taught. It will concentrate on, and provide insight into, these areas specifically relevant to legal assistants, such as evidence gathered during the investigation and discovery phase of a case. One contact hour.

PLA 2273 Tort Law 3 cr.

Prerequisite: PLA 1003. This course is an in-depth study of tort law, discussing intentional torts, negligence, strict liability, and their defenses. It prepares students to assist attorneys in analyzing and evaluating tort cases. Three contact hours.

PLA 2433 Business Organizations 3 cr.

Prerequisite: PLA 1003. This course provides a basic understanding of agency law, employment law, business contract law and the competencies necessary to assist an attorney in the formation and documentation required to form and operate sole proprietorships, general and limited partnerships and corporations. Three contact hours.

PLA 2465 Debtor/Creditor Law 3 cr.

Prerequisites: PLA 1003 and PLA 1104. This course prepares students to assist attorneys in collection, secured transactions and bankruptcy practice. The bankruptcy study will cover both the debtor and the creditor perspective. Three contact hours.

PLA 2484 Administrative Law 3 cr.

Prerequisites: PLA 1003 and PLA 1104. This course will prepare students for a career with a firm involved in administrative agency practice such as workers' compensation,

employment discrimination and Social Security disability. It also prepares students for governmental and private industry work that involves working with administrative regulations. Three contact hours.

PLA 2603 Wills, Trusts and Estates 3 cr.

Prerequisite: PLA 1003. This is a study of the legal aspects of the preparation of wills and trusts as well as the probating of estates. It also covers the procedures involved in accounting, administrations, gifts, life insurance and estate planning. Three contact hours.

PLA 2763 Law Office Procedures 3 cr.

Prerequisite: PLA 1003. This course covers the fundamentals of law office organization and procedure. It includes records management and accounting methods. Major attention is given to the development and use of a systems approach in the law office in order to increase efficiency and reduce legal costs. Three contact hours.

PLA 2793 Technology in the Law Office 3 cr.

Prerequisite: PLA 1003. This course will focus on the use of computer technology in the practice of law. Three contact hours.

PLA 2803 Family Law 3 cr.

Prerequisite: PLA 1003. This course familiarizes practitioners and potential legal assistants with the laws and procedures relating to marriage, separation, dissolution of marriage, annulment, custody and support, adoption, name change, guardianship and paternity. Three contact hours.

POS — Political Science

POS 2041 American Federal Government (Y) 3 cr.

This course consists of a study of the theory, organization, principles and functioning of the federal government, emphasizing the relationship of the individual to the government. The course includes reading and writing competencies. This course serves to meet the Gordon Rule writing requirement. Three contact hours. (CBE)

POS 2112 State and Local Government (Y) 3 cr.

This course, consisting of a study of state and local forms of government in the United States, explores the government of Florida as an example of activities and patterns of state government. In addition, the course examines the responsibilities of local government at county and city levels. Three contact hours.

PSC — Physical Science

PSC 1341 Physical Science (Y) 3 cr.

Students will benefit by taking high school algebra or Elementary Algebra prior to enrolling in this course. This course acquaints individuals with the development of the physical sciences, with the integrating principles and theories in the physical sciences, with the practice of the scientific method and with a useful knowledge of selected areas in mechanics, electricity and magnetism, periodicity and atomic structure, and nuclear phenomena. Presentation involves

lectures, demonstrations and films. The course is not essentially an introductory or preparatory course for any specific physical sciences. Three contact hours. (CBE)

PSY — Psychology

PSY 1012 General Psychology (Y) 3 cr.

This course consists of the description and understanding of an analysis of human behavior through the study of the interaction of individuals in the physical and social environment. Three contact hours. (CBE)

QMB — Quantitative Methods in Business

QMB 2100 Business Statistics (Y) 3 cr.

Prerequisite: MAC 1102. This course demonstrates how to apply selected statistical techniques to a wide variety of problems and situations arising in the areas of business, economics, finance and management. Three contact hours.

REA — Reading

**REA 0008 Reading Skills 4 cr.
(College preparatory studies course)**

(This course does not apply toward the associate's degree.)

Prerequisite: satisfactory score on CPT test. This fundamental reading course develops vocabulary, comprehension, learning strategies and study skills presented through a wide range of interdisciplinary readings. REA 0008 Reading Skills is designed for review prior to REA 0010. Students must satisfy appropriate exit level scores to complete this course successfully. Four contact hours.

**REA 0010 Introduction to Reading Techniques 4 cr.
(College preparatory studies course)**

(This course does not apply toward the associate's degree.)

Prerequisite: REA 0008 with a grade of "C" or better or satisfactory score on CPT test. This course is designed to enhance basic reading skills and to develop higher level vocabulary and comprehension skills, textbook reading techniques and learning strategies needed for success in college. Students must satisfy appropriate exit level scores to complete this course successfully. Four contact hours.

REA 1105 College Reading/Critical Analysis (Y) 2 cr.

Prerequisite: REA 0010 or satisfactory score on the placement test. This course is a college level reading course that emphasizes critical thinking/comprehension skills needed for success in college. This course will focus on vocabulary, learning strategies, and higher order thinking skills. This course covers CLAST reading competencies. College preparatory reading students are not exempt from the reading portion of CLAST must take REA 1105. Two contact hours.

REA 2125 CLAST Review: Reading Skills (Y) 1 cr.

Prerequisite: REA 1105 (if required). This course is designed for students who desire a brief, comprehensive review of reading skills. It is recommended for students who are preparing for the CLAST, for students who are retaking CLAST, and for students who are seeking a refresher course in reading skills. One contact hour.

REA 2205 Reading for Speed and Comprehension (Y)**3 cr.**

Prerequisite: REA 1105 or a satisfactory score on the placement test. This course is for college students, business and professional people, and other adults who would like to increase their reading rate, gain a higher level of comprehension, expand their vocabulary and improve their test taking skills. Three contact hours.

REE — Real Estate

REE 1040 Real Estate Principles and Practices (Y)**4 cr.**

This course provides students with the fundamentals of real estate and license law under Florida statutes. It includes a study of the business and legal aspects of real estate ownership, contracts, deeds, titles, mortgage instruments, property law and Florida Real Estate Commission governing policies and regulations relative to salespeople. Successful completion of this course and the end of course examination meets the Florida Real Estate Commission requirements. Four contact hours. (CBE)

REE 2430 Real Estate Law (Y)**3 cr.**

This course offers suggestions as to types of real estate documents, their form and contents and the mechanics of their use and contains a full legal, detailed exposition of every aspect of modern real estate transactions. Three contact hours. (CBE)

REE 2500 Real Estate Management**3 cr.**

Prerequisite: REE 1040 or real estate salesperson's certificate or broker's registration certificate. This course presents a comprehensive coverage of property management with emphasis on basic management concepts which can be applied to apartments, commercial buildings, shopping centers and urban renewal programs and also on creative management techniques for solving problems. Successful completion of this course and the end of course examination meets Florida Real Estate Commission's 45-hour post licensing requirement. Three contact hours. (CBE)

REL — Religion

REL 2000 Introduction to Religion (Y)**3 cr.**

Prerequisite: ENC 1101 or satisfactory score on the placement test. This course presents the fundamental concepts of the study of religion. It deals with the origin of religion, the concept of God, death and dying in a religious context, myth, ritual, ethics, doctrine, as well as other topics that are relevant to understanding religion as an academic discipline. Although examples are drawn from various religions, no particular religion is specifically studied. This course includes reading and writing competencies. Three contact hours.

REL 2210 Religious Thought in the Old Testament (Y)**3 cr.**

This course is a study of religious thought and instruction in the Old Testament with attention given to the problems of authorship, date, historical setting and textual criticism. Three contact hours.

REL 2240 Religious Thought in the New Testament (Y)**3 cr.**

This course studies the life and teachings of Jesus and the beginning of church life and thought as reflected in the New Testament. Three contact hours.

REL 2300 World Religions (Y)**3 cr.**

Prerequisite: ENC 1101 or satisfactory score on the placement test. This course consists of a survey of world religions with emphasis upon Hinduism, Buddhism, Judaism, Christianity and Islam. This course includes reading and writing competencies. Three contact hours. (CBE)

REL 2691 Topics In Jewish History (Y)**3 cr.**

This course covers topics and events of Jewish history. Topics may include but are not limited to the rise of anti-Semitism, the Holocaust, 19th century nationalism and the rise of Zionism, and archeological perspectives on history. Three contact hours.

RET — Respiratory Therapy

RET 1008 Pharmacology for the Respiratory Therapist**2 cr.**

Prerequisite: RET 1485. This course offers students a detailed understanding and knowledge of the basic factors involved in the field of pharmacology for the respiratory therapist and the application of this field to pulmonary diseases. Two contact hours.

RET 1024 Fundamentals of Respiratory Therapy**4 cr.**

This introductory course covers basic respiratory therapy equipment, medical gases, gas therapy and the respiratory therapy department. Four contact hours. (CBE)

RET 1276 Physical Assessment Skills**2 cr.**

Corequisite: RET 1024. This course provides the information and skills necessary to physically examine an adult, child and newborn patient with cardiopulmonary disease. Two contact hours.

RET 1450 Diagnostic Monitoring**3 cr.**

This course introduces students to arterial blood gas analysis and various techniques of monitoring critically ill patients. The course also includes the interpretation and clinical significance of the data gained from these monitoring techniques. Three contact hours.

RET 1485 Cardiopulmonary Anatomy and Physiology**4 cr.**

This course, designed to offer a thorough anatomical and physiological examination of the cardiopulmonary system, consists of an introduction to electrocardiology and chest roentgenology. In addition, the course includes a correlated examination of the renal system and circulatory system where relevant. Four contact hours.

RET 1824 Clinical I**2 cr.**

Prerequisite: consent of the professor. Corequisites: RET 1024 and RET 1485. This course provides students

with an introduction to the hospital environment, the function of the respiratory therapy department and the role and responsibilities of the respiratory therapist. Four contact hours (clinical).

RET 2264 Ventilatory Techniques 3 cr.

Prerequisite: consent of the professor. This course introduces students to artificial mechanical ventilation, classification of ventilators, indications, contraindications and side effects of mechanical ventilators, and modes of ventilation. Alternatives to conventional ventilation will also be studied as well as a review of current literature on mechanical ventilation. Three contact hours.

RET 2265 Advanced Monitoring and Therapeutic Techniques 2 cr.

Prerequisites: RET 1450 and RET 2264. This course introduces students to more advanced monitoring techniques in the areas of ventilation and oxygenation for the adult, pediatric and newborn patient. Two contact hours.

RET 2272L Clinical II 4 cr.

Prerequisite: RET 1824. This course introduces respiratory therapy students into the hospital departments and situations in which they may be expected to perform the procedures applicable to this point in their education. The course includes close supervision of the performance of these procedures. Eight contact hours (clinical).

RET 2273L Clinical Seminar in Intensive Respiratory Care I 1 cr.

Prerequisite: RET 1485. Corequisite: RET 2832. This course is a weekly clinical symposium dealing with the current practices in intensive respiratory care, relevant medical literature and patient case studies. Two contact hours (clinical).

RET 2284C Clinical Seminar In Intensive Respiratory Care II 1 cr.

Prerequisites: RET 2273L and RET 2264. Corequisite: RET 2833. This course is a continuation of the evaluation of current practices in intensive respiratory care, relevant medical literature and patient case studies. Two contact hours (clinical).

RET 2350 Advanced Pharmacology 2 cr.

Prerequisite: RET 1008. This course instructs students in advanced drug actions, delivery methods and ACES drugs. Two contact hours.

RET 2414 Pulmonary Function Studies 2 cr.

Prerequisite: RET 1485. This course is designed to introduce students to pulmonary function techniques and the clinical significance of the diagnostic data gained from this form of testing. Two contact hours.

RET 2434 Arterial Blood Gases and Critical Care Monitoring 2 cr.

Prerequisite: RET 1485. This course introduces students to arterial blood gas analysis and various techniques of monitoring critically ill patients. The course also includes

the interpretation and clinical significance of the data gained from these monitoring techniques. Two contact hours.

RET 2484 Pulmonary Pathology 4 cr.

Prerequisite: RET 1485. Pulmonary pathology gives an in-depth study of the more common diseases of the cardiopulmonary system including their etiology, pathophysiology, clinical picture and treatment. Four contact hours.

RET 2520 Community Health 2 cr.

Prerequisite: consent of the instructor. This course is designed to introduce students to community health organizations, respiratory health education and promotion, job preparation skills and respiratory ethics. Two contact hours.

RET 2543 Respiratory Extended Care Management 2 cr.

Prerequisite: consent of instructor. This course is designed to instruct on continuity of care for chronic cardiopulmonary disease patients. The course provides physiological concepts and therapeutic techniques utilized in rehabilitation, subacute and home settings. Two contact hours.

RET 2714 Neonatal and Pediatric Respiratory Care 3 cr.

Prerequisite: RET 1485 or consent of the professor. This course investigates fetal, neonatal and pediatric differences in cardiopulmonary anatomy and physiology, pediatric ventilatory management and ventilatory equipment, neonatal and pediatric cardiopulmonary pathologies, and adaptations of respiratory care techniques to pediatric patients. Three contact hours.

RET 2832 Clinical III 12 cr.

Prerequisite: RET 2272L. This course provides students with the essential clinical skills necessary to function as competent respiratory therapists in the critical care areas. Twenty-four contact hours (clinical).

RET 2833 Clinical IV 10 cr.

Prerequisite: RET 2832. In continuation, this course provides students with the essential clinic skills necessary to function as competent respiratory therapists in the critical care areas. Twenty contact hours (clinical).

RMI — Risk Management and Insurance

RMI 1521 Principles of Insurance (INS-21) (Y) 3 cr.

This course outlines the process of marketing insurance products to the ultimate consumer and, as such, will benefit all insurance professionals, from the novice to the seasoned professional. In addition, it prepares students to take part one of the Insurance Institute of America INS-21 National Exam, thus completing Part I of this professional certificate. Three contact hours. (CBE)

RMI 1522 Personal Insurance (INS-22) 3 cr.

This is an in-depth course in all forms of personal insurance, including auto, home, life, health and miscellaneous coverages. It is designed for all insurance professionals

from underwriters to producers. In addition, it prepares students for the INS-22 National Exam offered by the Insurance Institute of America (Part II of this professional certificate). Three contact hours.

RMI 1523 Commercial Insurance (INS-23) 3 cr.

This course presents an in-depth study of all forms of commercial insurance including bonding, worker's compensation, package policies and garage coverages. It is intended for all insurance professionals from the producer to the underwriter. Also, this course prepares students to take the INS-23 test offered by the Insurance Institute of America (Part III of this professional certificate.) Three contact hours.

RMI 1612 Principles of Casualty Insurance and Surety Bonding 3 cr.

This course is an introduction to the eight areas of automobile liability and physical damage insurance, worker's compensation and employers' liability insurance, business, professional and personal liability insurance, (theft coverages, multiple line trends and coverages), health insurance and miscellaneous casualty coverages. Three contact hours. (CBE)

RMI 1613 Principles of Property Insurance 3 cr.

This course is an introduction to the four areas of fire insurance, ocean marine, inland marine insurance, surety and fidelity bond, and multiple-line coverage. For each of these four areas, specimen contracts are examined. The course covers each area with regard to the perils, property, losses, persons, locations, time and hazards. Three contact hours. (CBE)

RMI 1615 Principles of Property Insurance Adjusting 3 cr.

This course, an introduction to the general principles of insurance and property loss of adjusting, covers risk and insurance, suretyship, risk management principles and the insurance transaction, the insurance contract (limitations on coverage and limitation on amount of loss), the procedure, investigation and reports of adjustment of property losses, and estimations of business losses. Three contact hours. (CBE)

RMI 1631 Principles of Liability and Claim Adjusting 3 cr.

This course in adjusting examines the principles and practices of adjusting all forms of liability and auto claims. Three contact hours. (CBE)

RMI 1664 Marketing Principles of Life and Health Insurance 3 cr.

This course presents a new approach toward the life and health insurance industry, its products, the market potential and the industry as a selling career. Three contact hours.

RMI 2524 Essentials of Risk Management (ARM 54) 3 cr.

This course focuses on the risk management decision-making process by identifying, analyzing and developing

alternative techniques for treating loss exposures. In addition, it introduces the financial management foundation and guidelines for selecting the best risk management alternative and most appropriate technique for handling a loss exposure. (preparation for I.I.A. ARM 54) Three contact hours.

RMI 2525 Essentials of Risk Control (ARM 55) 3 cr.

This course focuses on the process of developing and implementing guidelines for selecting risk management techniques that control and coordinate the organization's risk management effort. (preparation for I.I.A. ARM 55) Three contact hours.

RMI 2526 Essentials of Risk Financing (ARM 56) 3 cr.

This course completes the risk management decision-making process with respect to risk financing techniques. Attention is directed primarily to risk retention, including use of captive insurers and commercial insurance. (preparation for I.I.A. ARM 56) Three contact hours.

RMI 2535 Principles of Insurance Production (AAI 81) 3 cr.

This is an advanced course in the marketing of property and casualty insurance products. It is designed to prepare students to take the Accredited Adviser in Insurance (AAI) National Exam Number 81. This course will provide 28 hours of continuing education credit for insurance professionals. (This course completes Part I of the AAI professional designation.) Three contact hours.

RMI 2536 Multiple-Lines Insurance Production (AAI 82) 3 cr.

This course includes an in-depth study into the proper method for marketing commercial lines insurance coverages. Also, it will prepare students to take Part II of the Accredited Adviser in Insurance program. (This will complete Part II of the AAI professional designation.) Three contact hours.

RMI 2537 Agency Operations and Sales Management (AAI 83) 3 cr.

Included in this course will be a thorough study of the management and operations of an insurance agency. This course will prepare students to take Part III (AAI83) of the Accredited Adviser in Insurance program. Three contact hours.

RMI 2543 Life Insurance Accounting 3 cr.

The course corresponds to Part IV of the Life Office Management Association (LOMA) Insurance Education program. The course covers the principles of bookkeeping and accounting as an aid in understanding the life insurance accounting practices. Three contact hours.

RTE — Radiologic Technology

RTE 1111 Patient Care for Radiologic Technologists 3 cr.

Prerequisite: permission of program adviser. This course is designed to prepare radiologic technology students to provide basic patient care. Vital signs, body mechanics, verbal/

nonverbal communications and specialized radiologic procedures are covered in this course. Three contact hours.

RTE 2202 Radiologic Management and Education 3 cr.

Prerequisite: proof of current registration with the American Registry of Radiologic Technologist. This course is designed to prepare radiologic technology and radiation therapy students to provide basic patient care. Vital signs, body mechanics, verbal/nonverbal communications and specialized radiologic procedures are covered in this course. Three contact hours.

RTE 2587 Advanced Developments in Radiologic Technology 3 cr.

Prerequisite: proof of current registration with the American Registry of Radiologic Technology. This course is designed to familiarize the radiologic technologist with the latest advances in radiologic technology. Such topics as radiation protection, image intensification, heart catheterizations, three-phase circuitry, positron emission tomography, computerized tomography, magnetic resonance imaging and radiation therapy will be explored. Four contact hours: three lecture hours, one field experience hour.

RTV — Radio — Television

RTV 2000 Introduction to Broadcasting (Y) 3 cr.

This course consists of an introduction to the historical, cultural, social, legal, business and career aspects of radio and television broadcasting plus an introduction to the types and sub-types of broadcast media. Five contact hours: three lecture hours, two laboratory hours.

RTV 2100 Writing for Electronic Media (Y) 3 cr.

Prerequisite: ENC 1101. This pre-professional course is designed to provide fundamental instruction and practice in writing for the electronic media, including radio, television, film, news, commercials and industrial programming. Three contact hours.

RTV 2200 An Introduction to Television Production (Y) 3 cr.

The course provides an opportunity for students to become familiar with the basic operation of a television studio. The course will help students prepare for an entry-level position in a local TV station or production facility, as well as for continuation in a communications or journalism course of study. Four contact hours: two lecture hours, two laboratory hours.

RTV 2206 Broadcast Direction (Y) 3 cr.

Prerequisite: RTV 2200. This course, a continuation of An Introduction to Television Production, is intended for broadcast majors. The major topic is the direction of TV programs. Four contact hours: two lecture hours, two laboratory hours.

RTV 2260 Nonlinear Video Editing (Y) 4 cr.

Prerequisite: RTV 2206 or consent of instructor. This is a computer based course using high-end non-linear and on-line video/audio workstations. Students will use multiple

video and audio tracks, 2D and 3D-graphics, still photography and original art to develop a finished program. The program may be videotaped for broadcast, or an interactive non-broadcast industrial or educational project for CD-ROM.

RUS — Russian Language

RUS 1000 Conversational Russian (Y) 3 cr.

This course concentrates on the development of oral and conversational skills in the language. Communicative habits and cultural patterns that influence everyday conversation will be included. Visual and auditory aids will be used. Students are expected to work independently in the language lab and with audio tapes. This course is designed for everyday use of the language; it will not fulfill the general education foreign language requirements of the State University System. Three contact hours (unsupervised lab work.)

RUS 1120 Beginning Russian I (Y) 4 cr.

This beginning course consists of the fundamentals of Russian speech and grammar taught by integrating the basic communication skills of hearing and understanding, speaking, reading and writing. Five contact hours: four lecture hours, one unsupervised laboratory hour.

RUS 1121 Beginning Russian II (Y) 4 cr.

Prerequisite: RUS 1120 or equivalent. This course is a continuation of Beginning Russian I. Five contact hours: four lecture hours, one unsupervised laboratory hour.

RUS 2200 Intermediate Russian I (Y) 3 cr.

Prerequisite: RUS 1121. This course continues the study of Russian grammar, emphasizing the proper use of case and verbal forms. The nature of Russian syntax will also be addressed. Work in phonetics, translation, conversation and vocabulary development will constitute the major portion of the class. Cultural supplements will be employed throughout. Four contact hours: three lecture hours, one laboratory hour.

RUS 2201 Intermediate Russian II (Y) 3 cr.

Prerequisite: RUS 2200. This course continues the study of Russian grammar while advancing into such areas as modality and word formation. Conversational skills will be further developed and maintained, while primary emphasis is given to reading, translation and composition. Russian participles will be introduced. Four contact hours: three lecture hours, one laboratory hour.

SLS — Student Life Skills

SLS 1101 Dynamics of Student Success (Y) 3 cr.

This course is designed to assist students in adapting and coping with a college environment. Included in the course are study skills, academic motivation, self-assessment, college resources and other related topics. Three contact hours.

SLS 1201 Personal Development (Y) 3 cr.

This course is designed to assist students in learning more about their own stages of personal development and how developmental issues influence their understanding of

self, others and the environment in which they interact. Areas of development to be explored are psychosocial issues, cognitive structure, learning style, locus of control, values, moral/ethical development, choosing and pursuing personal goals, and other related issues. Three contact hours.

SLS 1223 Stress in Today's Society (Y) 3 cr.

This course, designed to acquaint students with the nature and scope of stress in today's society, examines the causes and methods of prevention from a lay perspective. The course also discusses general environmental and social stressors which affect all people to some degree. A laboratory experience will utilize various relaxation techniques which may aid students in coping with everyday stress. Four contact hours: two lecture hours, two laboratory hours.

SLS 1301 Career Planning and the World of Work (Y) 2 cr.

This course assumes that career choice is a continuous process involving the understanding of self and one's environment. Using assessment instruments as well as group discussion, students will utilize decision-making techniques to select a career direction which is compatible with their aptitudes, abilities, interests and personal values. Two contact hours.

SLS 1401 Computerized Career Exploration (Y) 1 cr.

A self-paced information gathering process designed for students who have not decided, are having difficulty deciding or need clarification in making a career choice. Topics will include work related interests, values, clarification and identification of abilities. Various computer based career exploration activities are scheduled at the convenience of students. There are no formal class hours. A minimum of fifteen hours of documented interaction are required for course completion. Students schedule their interactions with computers and counselors at times that are mutually convenient for staff and students. One contact hour.

SLS 1931 Selected Topics in Student Life Skills (Y) 1 cr.

The open format of this course provides an opportunity to address various selected topics in student life skills development. Students may only repeat SLS 1931, SLS 1932 and SLS 1933 for a total of six credit hours toward A.A. degree electives. One contact hour.

SLS 1932 Selected Topics in Student Life Skills (Y) 2 cr.

The open format of this course provides an opportunity to address various selected topics in student life skills development. Students may only repeat SLS 1931, SLS 1932 and SLS 1933 for a total of six credit hours toward A.A. degree electives. Two contact hours.

SLS 1933 Selected Topics in Student Life Skills (Y) 3 cr.

The open format of this course provides an opportunity to address various selected topics in student life skills development. Students may only repeat SLS 1931, SLS

1932 and SLS 1933 for a total of six credit hours toward A.A. degree electives. Three contact hours.

SOP — Social Psychology

SOP 1002 Human Relations (Y) 3 cr.

Drawing from several areas of behavioral science, this course, designed for students in business and technical fields, is also suitable for general education and personal enrichment but not recommended for students who plan to major in psychology. The course includes group dynamics, leadership, ethics, motivation and morale, social systems, formal and informal organizations, and other selected topics. Three contact hours.

SOP 1502 Dynamics of Behavior (Y) 3 cr.

This course consists of the study of individual behavior and how it is influenced by culture. This course emphasizes personal adjustment and individual development as they relate to interaction with other people. Three contact hours.

SPA — Speech Pathology and Audiology

SPA 1331 Fingerspelling (Y) 2 cr.

Prerequisite: SPA 1332. Corequisite: SPA 1330. This is an intermediate course designed to provide receptive and expressive fingerspelling. Drills and practice will help to improve fluency and speed. Two contact hours.

SPA 1332 American Sign Language I (Y) 3 cr.

An introduction to the linguistic structure and conceptual vocabulary of American Sign Language as used by deaf adults. This course will emphasize the development of American Sign Language skills including receptive and expressive conversational skills. The course will describe the history, values and culture of deaf people in America. There will be additional costs required which will vary based on activity or projects such as attendance to the deaf club and a trip to St. Augustine School for the Deaf. Three contact hours. (CBE)

SPA 1334 Structure of American Sign Language 3 cr.

Prerequisites: SPA 1380 and SPA 1382. This course is for intermediate or advanced signers with limited exposure to American Sign Language. American Sign Language, as used by deaf adults, is studied with an emphasis on the phonological, morphological, semantic, syntactical, idiomatic and metaphorical aspects of American Sign Language. Current research in the field is examined and discussed. Three contact hours.

SPA 1380 American Sign Language II (Y) 3 cr.

Prerequisite: completion of SPA 1332 with a grade of "C" or better. This course is a continuation of American Sign Language I and will emphasize intermediate level sign vocabulary, increasingly complex grammatical constructions, idioms, inflectional usage and the development of intermediate receptive and expressive conversational American Sign Language skills. There will be additional costs required which will vary based on activity or projects such as attendance to the deaf club and a trip to the St. Augustine School for the Deaf. Three contact hours.

SPA 1382 American Sign Language III (Y) 3 cr.

Prerequisites: completion of SPA 1332 and SPA 1380 with grade of "C" or better in both courses. This course, a continuation of American Sign Language II, will emphasize advanced level of sign vocabulary, compound complex grammatical constructions, usage and the development of advanced receptive and expressive conversational American Sign Language skills. There will be additional costs required which will vary based on activity or projects such as attendance to the deaf club and a trip to St. Augustine School for the Deaf. Three contact hours.

SPC — Speech Communication**SPC 2015 Introduction to Oral Communication (Y) 3 cr.**

Prerequisite: ENC 1101 with a grade of "C" or better. This course is a performance based course that provides theory and practice in interpersonal, small group, intercultural and mass communication. The course emphasizes the responsibilities of individuals in the communication process required by a variety of communication settings. The course explores the principles of communication, the barriers to communication, and techniques to improve communication skills. This course focuses on speaking and listening competencies and will reinforce reading and writing competencies. This course serves to meet the Gordon Rule writing requirement. Three contact hours.

SPC 2062 Speech Communication for Business and the Professions (Y) 3 cr.

Prerequisite: ENC 1101 with a grade of "C" or better. This course is designed to focus on developing and refining oral communication skills in business and the professions. Students will enhance basic speaking and listening skills with additional attention to making presentations, working in groups, handling interviews and meetings, and employing multimedia materials effectively. This course serves to meet the Gordon Rule writing requirement. Three contact hours.

SPC 2594 Forensic Activity (Y) 1 cr.

This course is composed of directed participation in forensic activities with emphasis on individual speech events. Tournament activities involve a major feature of forensics. Three contact hours (studio/rehearsal).

SPC 2600 Fundamentals of Speech Communication (Y) 3 cr.

Prerequisite: ENC 1101 with a grade of "C" or better. This essential course in speaking and listening skills instructs students in the principles and procedures that promote effective communication. This study includes message composition involving idea and information acquisition, determination of purpose and analysis of audience. This course also includes message transmittal involving vocal variations, articulation and appropriate levels of language usage and listening for both literal and critical comprehension. This course serves to meet the Gordon Rule writing requirement. Three contact hours. (CBE)

SPN — Spanish Language**SPN 1000 Conversational Spanish (Y) 3 cr.**

This course concentrates on the development of oral and conversational skills in the language. Communicative habits and cultural patterns that influence everyday conversation will be included. Visual and auditory aids will be used. Students are expected to work independently in the language lab and with audio tapes. This course is designed for everyday use of the language; it will not fulfill the general education foreign language requirements of the State University System. Three contact hours (unsupervised lab work).

SPN 1120 Beginning Spanish I (Y) 4 cr.

This beginning course consists of the fundamentals of Spanish speech and grammar taught by integrating the basic communication skills of hearing and understanding, speaking, reading and writing. Five contact hours: four lecture hours, one unsupervised laboratory hour. (CBE)

SPN 1121 Beginning Spanish II (Y) 4 cr.

Prerequisite: SPN 1120 or equivalent. This course is a continuation of Beginning Spanish I. Five contact hours: four lecture hours, one unsupervised laboratory hour. (CBE)

SPN 2200 Intermediate Spanish I (Y) 3 cr.

Prerequisite: SPN 1121. This course integrates a thorough review of the principles of grammar with compositions and conversations planned to develop a basic active vocabulary and facility in communicating in written and spoken Spanish. Students will study readings in the history and culture of Spain and Hispanic America. Four contact hours: three lecture hours, one unsupervised laboratory hour. (CBE)

SPN 2201 Intermediate Spanish II (Y) 3 cr.

Prerequisite: SPN 2200. This course is a continuation of Intermediate Spanish II. Four contact hours: three lecture hours, one unsupervised laboratory hour. (CBE)

STA — Statistics**STA 2023 Elementary Statistics (Y) 3 cr.**

Prerequisite: MAC 1102 or MAC 1140 with a grade of "C" or better. This course is designed to introduce students to the fundamentals of descriptive and inferential statistics with a pronounced emphasis on inference. The major topics include methods for analyzing sets of data, probability, probability distributions, estimation, confidence intervals, hypothesis testing, simple linear regression, and correlation. The probability and statistical skills measured by CLAST are among the skills taught in this course. Three contact hours. (CBE)

SUR — Surveying and Related Areas**SUR 1101 Surveying (Y) 3 cr.**

Prerequisites: MAC 1114 and ETD 1100. This course is a study of the fundamentals of surveying with emphasis on distance measurement, leveling, angles, bearings, traverses, topographic data collection and construction layout.

The course includes related field work, computations and drawing. Four contact hours: two lecture hours, two laboratory hours.

SYG — Sociology, General

SYG 2000 Introductory Sociology (Y) 3 cr.

This course includes a survey of the scope, methods and concepts of sociology. A wide range of topics including socialization of children, culture, crime and deviance, family medicine, education and stratification are covered. Three contact hours. (CBE)

SYG 2010 Social Problems (Y) 3 cr.

Prerequisite: SYG 2000. This course includes a consideration of major social problems like pornography, family violence, alcoholism, organized crime, poverty and pollution. Special attention is given to American society. Three contact hours.

SYG 2430 Marriage and Family (Y) 3 cr.

This course includes a sociological study of the family and its forms as well as issues in mate selection, dating, marriage, child rearing, divorce and remarriage. Special attention is given to the contemporary American family. Three contact hours.

TAR — Architecture

TAR 2120 Architectural Drafting (Y) 3 cr.

Prerequisite: ETD 1100. (Interior design students may substitute IND 1606 for ETD 1100.) This course introduces residential design and planning and requires an original solution to a given residential concept. Students not only prepare original tracings consisting of floor plans, elevations are wall sections, but they also produce large scale details from the original design. The emphasis of the course is on applied principles of architectural drafting and detailing. Four contact hours: two lecture hours, two laboratory hours. (CBE)

TAX — Tax

TAX 2000 Individual Taxes (Y) 3 cr.

Prerequisite: ACG 2021 is recommended. This course, recommended for associate in science in accounting degree students, is a study of the Federal Revenue Code regulations and cases which apply to the determination of income taxes for individuals. Topics to be considered will include the preparation of the U.S. Individual Income Tax Return Form 1040 and its supplemental forms. Three contact hours.

THE — Theatre

THE 2000 Theatre Appreciation (Y) 3 cr.

Prerequisite: ENC 1101 or satisfactory grade on the placement test. This introductory course consists of the study of dramatic art as presented upon the stage. The course includes theatre organization, stage techniques, fundamental dramaturgy and a survey of theatre architecture in Western civilization. The course includes reading and writing competencies. Three contact hours.

THE 2100 Introduction to Theatre History (Y) 3 cr.

This course surveys theatre history and drama from the theatre's origin in ancient Greece to the present. Three contact hours.

THE 2262 Costume History and Design I (Y) 3 cr.

Prerequisite: TPA 1000. This course is a study of the historical trends in costumes from Egyptian to the Late Georgian periods, with an emphasis on the relationship to theatrical production. Three contact hours.

THE 2263 Costume History and Design II 3 cr.

Prerequisite: THE 2262. This course is a continuation of Costume and History Design I. A study of the historical trends in costumes from 1789 to the present, with an emphasis on the relationship to theatrical production. Three contact hours.

THE 2305 Survey of Dramatic Literature (Y) 3 cr.

Prerequisite: ENC 1101. This course is a survey of western theatre and drama from the Greeks to present day. Literary concepts particular to drama, such as plot, character, theme, and style are explored. The course also places dramatic literature in the social framework of its age with emphasis on play production, actors, and audiences. Representative plays from major periods are studied. Three contact hours.

THE 2945 Drama Practicum (Y) 1 cr.

This course consists of the planning and execution of production functions, scene construction and painting, props, costuming, lighting and other full technical responsibilities. This course includes writing competencies. Three contact hours (studio/rehearsal).

TPA — Theatre Production and Administration

TPA 1000 Introduction to Theatre Design (Y) 3 cr.

This course is an introductory integrated design course on the basic principles of theatrical design in the areas of costume, scenic and lighting design. The course will include the study of fashion, architecture, art and decor as they relate to and influence theatrical design. Three contact hours.

TPA 1060 Scene Design (Y) 3 cr.

Prerequisite: consent of professor. This course is a detailed introduction to the principles and techniques used in scenic design. This course will include the discussion and practice in analyzing scripts, visualizing a design concept, drafting, painters elevations and rendering and developing design portfolio. Three contact hours.

TPA 1210 Stagecraft I (Y) 3 cr.

This course is an introduction to the tools, terminology, activities materials and principles of stagecraft. Assigned practical work in a supervised production is required outside of class. Six contact hours: three lecture hours, three practical work hours on production (a minimum of 45 hours for the term).

TPA 1211 Stagecraft II (Y) 3 cr.

Prerequisite: TPA 1210. This course is a continuation of Stagecraft I, with an emphasis on more advanced construction techniques and problems. Students will serve in supervisory capacities on productions. Practical work outside of class is required on productions. Six contact hours: three lecture hours, three practical work hours on production (a minimum of 45 hours for the term).

TPA 1220 Introduction to Stage Lighting (Y) 3 cr.

Prerequisite: TPA 1000. This course is an introduction to the fundamentals of lighting the stage, including a basic introduction to electricity, stage lighting instrumentation and control, color science and an introduction to lighting design to create theatrical mood and interpretation of a production. Work outside of class on productions is required; students will serve on lighting crews for hands-on application of the classroom material. Six contact hours: two lecture hours, two laboratory hours and two practical work hours on productions (two hours/week is an average, thirty hours for the term is the requirement).

TPA 1248 Stage Make-up (Y) 3 cr.

This course is an introduction and application of the principles of stage make-up. Three contact hours.

TPA 1273 Stage Properties (Y) 3 cr.

This course is a study of the history, style and decoration of practical scenic and hand properties. It also includes an introduction to specialty tools and materials used in the construction or reproduction of stage properties. Practical experience in the acquisition and running of properties for production. Work outside of class is required on productions. Four contact hours: three lecture hours, one practical work hour on production (a minimum of 15 hours for the term).

TPA 1290 Technical Theatre Lab I (Y) 1 cr.

This course is limited to theatre and entertainment technology associate in science degree-seeking students or those students with a demonstrated ability in the entertainment technology field, with permission of the instructor. The course includes practical experience in the machinations of the backstage operations of a theatre. The course will emphasize skills in working independently with a high level sense of responsibility for the work assigned. The concentration of this course will vary depending on the skills of students and the needs of the theatre, competency in working extended hours on a production is expected. The hours worked give credit for hours required for other entertainment technology courses. Seven contact hours: one lecture hour, six practical work hours in production (a minimum of 90 hours for the term).

TPA 1291 Technical Theatre Lab II (Y) 1 cr.

Prerequisite: TPA 1290. This course is limited to theatre and entertainment technology associate in science degree-seeking students or those students with a demonstrated ability in the entertainment technology field, with permission of the instructor. The course includes practical experience in the machinations of the backstage operations of a theatre. The course will emphasize skills in working independently with a high level sense of responsibility for the work

assigned. The concentration of this course will vary depending on the skills of students and the needs of the theatre, competency in working extended hours on a production is expected. The hours worked give credit for hours required for other entertainment technology courses. Seven contact hours: one lecture hour, six practical work hours in production (a minimum of 90 hours for the term).

TPA 2077 Scene Painting (Y) 3 cr.

Prerequisite: TPA 1000. This course is an introduction to the tools, materials, and techniques used to paint scenery for the theatre. Assigned practical work in supervised production activities outside of class is required, a minimum of 15 hours for the term. Four contact hours: three lecture hours, one practical work hour on production.

TPA 2083 Technical Design Individual Problems 3 cr.

Prerequisite: minimum of 45 credit hours in the program. In this course students will develop and work on a single, challenging project individually tailored for each student with the assistance of the instructor. Projects will be reviewed and presented to the class periodically throughout the semester. Three contact hours.

TPA 2212 Sound for the Stage (Y) 3 cr.

This course is an introduction to the application of the principles of theatre sound. Training in the use and maintenance of theatre sound equipment, recording and editing sound effects tapes, training in electronic sound reinforcement. The course requires work outside the classroom applying the principles learned in the practical application of theatre sound for production. Four contact hours: three lecture hours, and one practical work hour on productions (a minimum of 15 hours for the term).

TPA 2221 Advanced Stage Lighting (Y) 3 cr.

Prerequisites: TPA 1000 and TPA 1220. This course is a continuation of Introduction to Stage Lighting, with more emphasis on lighting design, and developing a lighting design portfolio. Work outside of class on productions is required. Qualified students will be given design assignments on productions. Six contact hours: four lecture hours, and two practical work hours on productions (a minimum of 30 hours for the term).

TPA 2230 Costume Techniques (Y) 3 cr.

This course is a study of basic costume construction techniques for theatrical and dance costumes. The course will cover proper measuring skills, various construction techniques, and understanding of fabrics, costume cutting skills, and dyeing. Work outside of the class time is required on productions. Six contact hours: four lecture hours, and two practical work hours on productions (a minimum of 30 hours for the term).

TPA 2292 Technical Theatre Lab III (Y) 1 cr.

Prerequisite: TPA 1291. This course is limited to theatre and entertainment technology associate in science degree-seeking students or those students with a demonstrated ability in the entertainment technology field, with permission of the instructor. The course includes practical experience in the machinations of the backstage operations of a

theatre. The course will emphasize skills in working independently with a high level sense of responsibility for the work assigned. The concentration of this course will vary depending on the skills of students and the needs of the theatre, competency in working extended hours on a production is expected. The hours worked give credit for hours required for other entertainment technology courses. Seven contact hours: one lecture hour, six practical work hours in production (a minimum of 90 hours for the term).

TPA 2293 Technical Theatre Lab IV (Y) 1 cr.

Prerequisite: TPA 2292. This course is limited to theatre and entertainment technology associate in science degree-seeking students or those students with a demonstrated ability in the entertainment technology field, with permission of the instructor. The course includes practical experience in the machinations of the backstage operations of a theatre. The course will emphasize skills in working independently with a high level sense of responsibility for the work assigned. The concentration of this course will vary depending on the skills of students and the needs of the theatre, competency in working extended hours on a production is expected. The hours worked give credit for hours required for other entertainment technology courses. Seven contact hours: one lecture hour, six practical work hours in production (a minimum of 90 hours for the term).

TPA 2600 Stage Management (Y) 3 cr.

Prerequisite: previous courses in technical theatre. This course is the study and application of the methods and techniques used by the stage manager, from pre-production to auditions and from the first rehearsal through closing night and strike. Three contact hours.

TPP — Theatre Arts

TPP 2110 Acting I (Y) 3 cr.

This introductory course provides instruction and training in the basic concepts of acting, including methods, vocabulary, discipline and exploration of the creative process through exercises in observation, awareness and performance. The acting activities are intended as classroom assignments and do not require participation in other courses. Three contact hours.

TPP 2111 Acting II (Y) 3 cr.

Prerequisite: TPP 2110 or consent of the instructor based on exhibition of necessary level of vocal skills and physical awareness. This course is a continuation of Acting I and provides opportunities for experimentation with scripted material, including scene study, analysis, audition and performance techniques. The acting activities are intended as classroom assignments and additional involvement in other productions. Three contact hours.

TPP 2310 Beginning Directing (Y) 3 cr.

Prerequisite: TPP 2110 or permission of the instructor. This course is intended to provide theatre students with the basic principles involved in directing for the stage, a foundation for artistic and conceptual analysis of a script, and the artistic exploration needed to bring that script to

realization on the stage. Topics included are the elementary principles of directing, exercises in implementation of specific skills relevant to the exercise of that craft, text analysis and interpretation, goals and methods of collaboration, and interpretive/creative projects in which research and experimentation is stressed. Three contact hours.

TPP 2500 Movement Techniques for Theatre I (Y) 3 cr.

Prerequisite: TPP 2110 or permission of the instructor. This course is intended to train theatre students in the basic techniques of fully utilizing physical expression for characterization. Students will be trained in specific exercises for physical awareness, strength, flexibility, and versatility. Students will be exposed to the various approaches of major movement theorists in the theatre today, and will explore those approaches through practical and creative application. Three contact hours.

TPP 2710 Voice Techniques for Theatre I (Y) 3 cr.

Prerequisite: TPP 2110 or consent of the instructor. This course is intended to train theatre students in releasing techniques in order to free the natural speaking voice, and provide a basic understanding of articulation techniques for the stage. To train students in specific exercises for breathing, releasing, flexibility in the voice, as well as in vocal strength and agility. To train students to expand range in pitch, resonance, rate and volume. To provide students with knowledge on the mechanics of vocal production and basic anatomy of the vocal system. Three contact hours.

TRA — Transportation

TRA 1010 Principles of Transportation (Y) 3 cr.

This course is an introduction to transportation. Material includes the role and importance of transportation in the economy and to users, economic and operational characteristics, special carrier services, third party carriers, urban mass transportation and tourism. Managerial issues discussed are the financing of transportation, carrier management information systems and communications. Three contact hours.

TRA 1031 Transportation Management and Theory (Y) 3 cr.

This course is designed for students advancing to the management stage in the transportation field. Material covered includes financial management, business law, management's relation to government, marketing management, management theory and philosophy, and broad management perspective. The objective of this course is to give students an overall picture of the practical operating nature and problems of the business, especially related to transportation and distribution. This course ties together all other business and technical courses as well as introducing the human element to the business environment. Three contact hours.

TRA 1032 Transportation and Traffic Management I 3 cr.

The fundamental procedures of traffic management are treated from the viewpoint of on-the-job requirements in the field. This course provides training and practice in freight

classification, tariff interpretation and selection, rate checking techniques, ZIP code pricing, contracts and negotiations, routing and other elements of everyday incidences in the transportation department. Completion of this course partially covers requirements for certification by the Institute of Logistical Management. Three contact hours. (CBE)

TRA 1033 Carrier Liability and Claims 3 cr.

This course covers the principles of claims and proper procedures to be applied by shippers and carriers in loss, damage or delay of goods in transit and techniques for prevention. The basic laws of shipper/carrier liability (common and statute) are explained and illustrated by leading cases. Students also benefit from the opportunity to share problems, situations and experiences with their peers in active participation. Three contact hours.

TRA 1052 Transportation and Traffic Management II 3 cr.

This course is concerned with advanced aspects of traffic management techniques. Rate construction and tariff compilation are studied. Freight rate relationships are examined by use of tariff publications which express them. Terminal facilities and switching, demurrage and storage, reconsignment and diversion, transit and embargoes are similarly treated in this course. The objective is to explore the full scope of the transportation plant and its services as a necessary preparation to the efficient use of the transportation system. Completion of this course partially covers the requirements for certification by the Institute of Logistical Management. Three contact hours. (CBE)

TRA 2020 Economics of Transportation (Y) 3 cr.

Economic patterns and forces are studied in conjunction with carrier cost structures, inter-carrier competition and the economic and regulatory pressures which influence rate making policy and build freight rate floors and ceilings. Rate theory, rate making, rate structure, marketing, distribution strategies and available alternatives are discussed. This course is a requirement for an associate in science degree in transportation and must be taken at either FCCJ or UNF to obtain a B.B.A. in transportation and logistics. Completion of this course partially covers the requirements for certified member in the American Society of Transportation and Logistics. Three contact hours.

TRA 2053 Transportation and Traffic Management III 3 cr.

This course deals with import/export transportation and documentation to provide students with the proper techniques in foreign commerce through a proper understanding of the basic tools and terminology, the techniques of import/export, the requirements of governmental agencies and methods of identifying and entering export markets. Also covered are terms of sale, banking and financial documents, marine insurance, shipping containers, commercial invoices, export licenses, and export declarations. Completion of this course partially covers the requirements for certification by the Institute of Logistical Management. Three contact hours. (CBE)

TRA 2054 Transportation and Traffic Management IV 3 cr.

This course is designed for managers and persons aspiring to advance in transportation, distribution, marketing or materials management with industrial companies of carriers. Students will have their skills enhanced and sharpened by the concepts and practices reviewed and expanded in this course. It is an excellent course for managers who want an extensive overview of transportation and its relationship to the corporate structure. Completion of this course partially covers the requirements for certification by the Institute of Logistical Management. Three contact hours.

TRA 2412 Railroad Technical Careers 3 cr.

This course combines classroom-based lecture and discussion with field observation. It is designed to provide students with information about technical careers in railroading so that they can choose suitable career paths and to demonstrate the relationship among technical work groups in day-to-day railroad operations. Three contact hours.

TRA 2413 History of Railroading 3 cr.

This course combines lecture and discussion to provide students with an understanding of the history and traditions of railroading and the industry's role in North American economic development. Three contact hours.

TRA 2414 Railroad Operations 3 cr.

This course combines classroom-based lecture and discussion to provide students with information about the industry, its major assets, its structure and typical operations. Upon successful completion of this course, students will be able to define the current North American railroading industry characteristics, basic operations components and processes, and industry structure and administrative processes. Three contact hours.

TRA 2415 Railroad Safety, Quality, and Environmental Awareness 3 cr.

This course combines classroom-based lecture and discussion to provide students with a basic understanding of the importance of quality, safety, personal health and environmental awareness to the railroad industry and basic tools and techniques for improving them on the job. Upon successful completion of the course, students will be able to define and explain the needs for improved quality, safety, health, and environmental awareness, describe their basic principles, explain the elements of successful programs to improve them, and apply them in typical tasks on the job. Three credit hours.

WST — Women's Studies

WST 2010 Introduction to Women's Studies (Y) 3 cr.

Prerequisite: ENC 1101. This interdisciplinary course will examine the political, social, literary and economic issues of American women in the 19th and 20th centuries. Topics to be addressed include women and sexuality, women in politics, women in the work place and women in the arts. Three contact hours.

ZOO — Zoology

ZOO 1010C General Zoology (Y) 4 cr.

Students will benefit by taking Life in Its Biological Environment, Principles of Biology II or high school biology prior to enrolling in this course. This is a survey of the animal kingdom with emphasis on taxonomy, life cycles, evolution, organ systems and phylogenetic relationships. A representative of each of the major groups will be discussed and investigated. Six contact hours: three lecture hours, three laboratory hours.

SPECIAL SERIES COURSES

Cooperative Education

Prefix will be assigned according to student work experience.

—1949 Cooperative Education Work

Experience I 3 cr.

The first work experience in cooperative education provides students with meaningful experiences that will enhance their college education through career exploration and job training. Forty contact hours.

Prefix will be assigned according to student work experience.

—2949 Cooperative Education Work

Experience II 3 cr.

The second work experience in cooperative education provides students with further meaningful experiences that will enhance their college education through career exploration and job training. Forty contact hours.

COMPENSATORY COURSES

College Level Academic Skills Test (CLAST) Review

ENC 0007 CLAST Review: Reading, Essay and English Language Skills

This course is designed for students who desire a brief, comprehensive review of the essential communication skills including reading, writing and grammar. It is recommended for students who are preparing for the CLAST, students who are retaking CLAST and students who are seeking a refresher course in communication skills.

ENC 0090 CLAST Review: English Language Skills and Essay

This course is designed for students who desire a brief, comprehensive review of the essential communication skills including essay, writing and grammar. It is recommended for students who are preparing for the CLAST, for students who are retaking CLAST, and for students who are seeking a refresher course in communication skills.

REA 0003 CLAST Review: Reading Skills

This course is designed for students who desire a brief, comprehensive review of reading skills. It is recommended for students who are preparing for the CLAST, for students who are retaking CLAST, and for students who are seeking a refresher course in reading skills.

MAT 0012 Mathematics Review and Remediation for CLAST

This course is designed to meet the needs of associate in arts and associate in science degree-seeking students to further their mastery of the mathematics skills as related to the College Level Academic Skills Test.

Academic Skills Review

IDS 0004 Academic Skills Review

Intensive review is given in mathematics, reading and writing for students who require assistance in meeting the entry-level competencies for the Developmental Education Link Through Achievement (DELTA) program college credit track. Individual educational plans are developed for all students in the subject(s) identified in order to allow them to move ahead as rapidly as possible.

Continuing Education Course Descriptions

All courses in the following list are not taught each term. Class schedules which show the courses that will be offered are published prior to each term.

Career Advancement Courses

ACR 0001 Air Conditioning and Refrigeration Theory I

This course is designed to teach entry-level job skills. Topics include the refrigeration cycle, heat and its measurement and types, application of latent heat, temperature and its measurement, heat transfer and control, temperature conversion formulas, temperature BTU chart and piping techniques.

ACR 0001L Air Conditioning and Refrigeration Lab I

Prerequisite: ACR 0002 or consent of instructor. This course is designed to teach entry-level job skills. Topics include compressors, condensers, tubing, evaporators, receivers, metering devices, basic cycle controls, refrigerant characteristics, refrigerant oils, basic refrigeration cycle, and personal and industrial safety.

ACR 0002 Air Conditioning and Refrigeration Theory II

Prerequisite: ACR 0001. This course is a continuation of Air Conditioning and Refrigeration Theory I and is designed to teach entry-level job skills. Topics include basic refrigeration cycle, valves, accessories, piping dehydration, charging, discharging, installation procedures, multiple systems, troubleshooting, business ethics, employee and employer responsibilities, personal and industrial safety, and compressors.

ACR 0002L Air Conditioning and Refrigeration Lab II

Prerequisite: ACR 0001L or consent of instructor. This course is a continuation of Air Conditioning and Refrigeration Lab I and is designed to teach entry-level job skills. Topics include refrigeration cycle, accessories, piping, dehydration, charging, discharging, shop safety, installation procedures, multiple system, troubleshooting, compressors, control wiring, and personal and industrial safety.

ACR 0100 Basic Electricity and Schematics

This course is designed to teach entry-level job skills. Topics include wiring diagram symbols, schematic wiring diagram circuits, schematic wiring diagram exercises, electric meter, alternating current fundamentals, single phase motor theory, single motor testing, motor protection, troubleshooting, electrical wiring and electrical components.

ACR 0102 Applied Electricity and Schematics

Prerequisite: ACR 0100 or consent of instructor. This course is a continuation of Basic Electricity and Schematics and is designed to teach entry-level job skills. Topics include heat pumps, gas and oil furnaces, electric furnaces, straight cooling units and building electrical control panels.

ACR 0621 Applied Heating I

Prerequisite: ACR 0100 or consent of instructor. This course is designed to teach entry-level job skills. Topics

include gas furnaces, gas controls, properties of gas, gas piping, gas combustion, gas burners, ventilation and combustion air, gas troubleshooting, electric heat, heat pumps and gas efficiency checkout.

ACR 0622 Applied Heating II

Prerequisite: ACR 0621 or consent of instructor. This course is a continuation of Applied Heating I and is designed to teach entry-level job skills. Topics include oil efficiency, oil heating, electric heat, heat pumps, troubleshooting, compressor failure and clean up after burn out.

ACR 0781 Container Refrigeration Fundamentals

Corequisite: ACR 0783. This course is designed to help prepare students for job entry into the container refrigeration service and repair field. The course includes instruction in the use of tools and equipment, servicing procedures, system evaluation and diagnosis. The course includes a combination of classroom and laboratory experience.

ACR 0783 Applied Electricity for the Container Refrigeration Mechanic

Corequisite: ACR 0781. This course is designed especially for container refrigeration mechanics seeking entry-level job training in electrical controls, safety devices, components, test equipment, symbols and schematic diagrams.

AER 0110 Rider Mower Engine Repair

Prerequisite: SER 0001, laboratory experience or consent of instructor. This course is designed to teach entry-level job skills. Topics include instruction and hands-on experiences on the tune-up procedures and maintenance repairs necessary on many types of lawn and garden equipment. It is required for entry-level job mechanics and completion certificate.

AER 0170 Air Conditioning and Heating

This course is designed to teach entry-level job skills in the theory, service and repair of automotive heating and air conditioning systems. This course includes a combination of classroom and shop experience.

AER 0230 Manual Drive Trains and Axles

This course is designed to teach the theory of basic operation and the methods used to diagnose, adjust and repair manual transmissions, transaxles and drive train components. This course includes a combination of classroom and shop experience.

AER 0250 Automatic Transmissions and Transaxles I

This course is designed to teach entry-level skills in the theory of operation and repair of domestic three speed automatic transmission/transaxles. Instruction includes basic service and repair of automatic transmissions/transaxles. This course includes a combination of classroom and shop experience.

AER 0251 Automatic Transmissions and Transaxles II

This course is a continuation of Automatic Transmissions and Transaxles I and is designed to teach skills in the theory of operation of domestic four-speed and overdrive

transmissions/transaxles and import transmissions/transaxles. This course includes a combination of classroom and shop experience.

AER 0254 Automatic Transmissions and Transaxles I

This course is designed to teach entry-level job skills in the theory of operation and repair of domestic three speed automatic transmission/transaxles. Instruction includes basic service and repair of automatic transmissions/transaxles. This course includes a combination of classroom and shop experience.

AER 0255 Automatic Transmissions and Transaxles II

Prerequisite: AER 0254. This course is a continuation of Automatic Transmissions and Transaxles I and is designed to teach skill in the theory of operation of domestic four speed and overdrive transmissions/transaxles and import transmissions/transaxles.

AER 0300 Electrical Systems I

This course is designed to teach basic entry-level job skills. Topics include instruction in engine electrical systems, starting and charging systems, accessory systems and an introduction to computer control systems. This course includes a combination of classroom and shop experience.

AER 0301 Electrical Systems II

Prerequisite: AER 0300. This course is an advanced study of automotive electrical and electronic technology covering theory with application to modern vehicles. Areas covered include lighting systems, safety systems, display panel instruments, convenience systems, sensing and conversion devices, and computer controls. Students are expected to have basic knowledge of electrical systems, engine operation, fuel systems, and engine performance.

AER 0311 Electrical Systems II

Prerequisite: AER 0300. This course is an advanced study of automotive electrical and electronic technology covering theory with application to modern vehicles. Areas covered include lighting systems, safety systems, display panel instruments, convenience systems, sensing and conversion devices, and computer controls. Students are expected to have basic knowledge of electrical systems, engine operation, fuel systems and engine performance.

AER 0414 Brake Systems

This course is designed to teach entry-level job skills in the theory, operation and repair of drum, disc and anti-lock brake systems. This course includes a combination of classroom and shop experience.

AER 0452 Steering and Suspension

This course is designed to teach entry-level job skills. Topics included are service and repair of steering and suspension systems, power steering, wheels and tires. This course includes a combination of classroom and shop experience.

AER 0501 Engine Performance I

This course is designed to teach entry-level job skills in the diagnosis and repair of drivability problems. Topics

covered include engine performance and electrical and computer system operations. Emphasis is placed on manufacturer's diagnostic charts and advanced diagnostic equipment. Use of scanners on both carburetor and fuel-injected vehicles will be addressed.

AER 0502 Engine Performance II

Prerequisite: previous training or experience. This course is an advanced study of engine performance with heavy emphasis on computerized engine controls. Students will gain knowledge of common components of engine control systems, including sensing devices, actuators, control modules, diagnosis and service of import automobiles. Diagnosis and service will cover: Bosch continued, Toyota, Nissan, Honda, and other imports. Also covered will be the study of lab scope wave form and interpretation and analysis.

AER 0511 Emissions and Fuel Systems

Prerequisites: AER 0590 and AER 0300 or consent of instructor. This course is designed to teach entry-level job skills in fuel systems and emission control systems and also includes computer control and fuel injection. This course includes a combination of classroom and shop experience.

AER 0590 Engines

This course is designed to teach entry-level job skills for mechanics and includes instruction in engine tuning, engine repair and diagnosis. This course includes a combination of classroom and shop experience.

ARR 0111 Automotive Welding

This course is designed specifically for entry-level job training in the automotive body repair and refinishing field. Topics include oxygen acetylene welding, welding and brazing, sheet metal welding and brazing, metal inert gas welding, panel spotting and leading wiping or filling.

ARR 0271 Basic Automotive Glass

This course is designed specifically for entry-level job training in automotive glass replacement. Emphasis is on safety, basic tools, weatherstrips, retainer and moulding clips, types of glass, glass operating mechanisms, door latches and locks, and water and air leaks.

ARR 0273 Advanced Automotive Glass and Sheet Metal

Prerequisite: ARR 0271. This course is designed to teach entry-level job skills in the automotive body repair and refinishing field. Topics include door operating mechanism, removal and alignment of headers and front bumpers, hoods and fenders, trunk lids and tail gates.

ARR 0291 Basic Automotive Body Repair

This course is designed specifically for entry-level job training in automotive body repair. Emphasis will be on metal straightening, metal finishing, buckled metal, direct and indirect damage, tools and final assembly.

ARR 0292 Advanced Automotive Body Repair and Panel Replacement

Prerequisite: ARR 0291. This course is a continuation of Basic Automotive Body Repair and is designed to teach entry-level job skills. Topics include emphasis on safety,

vehicle identification, metal straightening, analysis of damage, repair of body panels, power tools and quarter panel replacement.

ARR 0351 Damage Appraising and Frame Straightening

This course is designed specifically for entry-level job training in damage appraising and frame straightening. Topics include collision estimating, vehicle identification, types of estimates, contracts, replacement, repair, dis-counting and markups.

ARR 0411 Basic Automotive Painting

This course is designed specifically for entry-level job training in automotive painting. Emphasis will be on safety, air compressors, paint booth operation, painting equipment, sanding equipment, paint identification, spray patterns and surface preparation.

ARR 0412 Advanced Automotive Painting and Custom Painting

Prerequisite: ARR 0411. This course is a continuation of Basic Automotive Painting and is designed to teach entry-level job skills. Topics include safety, air equipment, sanding techniques and equipment, paint problems, surface preparation, spot repair, paint additives, special effects and clean up.

BCV 0020 Tools and Pre-Construction Skills

This course is designed to teach entry-level job skills in carpentry. Topics include the safe use of all hand and power tools, construction of saw horses, saw vises and tool box. The course also includes the uses of the framing square and a review of working drawings.

BCV 0046 Leveling Instruments, Site Preparation and Layout

This course is designed to teach entry-level job skills in carpentry. Topics include the importance of accurate work in laying out buildings with the use of different leveling instruments and the many aspects of site preparation and layout of buildings and houses.

BCV 0103 Wood Products, Substitutes, Lumber and Building Adhesives

This course is designed to teach entry-level job skills in carpentry. Topics include wood, wood substitutes, different kinds of construction lumber, their growth and how wood finally becomes lumber. This course also includes building adhesives, their types and their applications.

BCV 0139 Foundation Formwork, Wall and Floor Framing

This course is designed to teach entry-level job skills. Topics include procedures necessary to make buildings and houses strong. The course also includes framing and bracing of floors and walls.

BCV 0140 Roof Framing I

This course is designed to teach entry-level job skills in carpentry. Topics include basic styles of roofs and construction and framing of a gable room.

BCV 0141 Roof Framing II

Prerequisite: BCV 0140 or consent of instructor. This entry-level job course is a continuation of Roof Framing I. Topics include layout and construction of a combination roof.

BCV 0170 Interior Finish

This course is designed to teach entry-level job skills in carpentry. Topics include the fundamentals of wall coverings, door hangings, windows, stairs and cabinets.

BCV 0173 Exterior and Hardware Finishes

This course is designed to teach entry-level job skills in carpentry. Topics include the different types of exterior finishing materials and their application. The course also includes the different finish and rough hardware methods of installation, intended uses and appearances.

BCV 0500 Introduction to Plumbing

This course is designed to teach entry-level job skills and to familiarize students with trade-related words and terms that will be encountered in the work place. Also included will be safety, apprenticeship requirements, working conditions, wages, benefits and job specialization.

BCV 0502 Hand and Power Tools/Joint Fabrication

This course is designed to teach entry-level job skills. Topics include hand and power tools, steel-fabricating dies and machines, copper fabricating torches and cutters, collecting or installing various types and sizes of fittings, assembling fittings and fixtures to sanitary and potable water systems, and safety.

BCV 0503 Plumber's Mathematics

This course is designed to teach entry-level job skills and to familiarize students with measuring techniques including fitting and fixture allowances. Skills in calculating fractions, decimals and mixed numbers will be reviewed. Practical problems in running pitch and grade as well as volumetric calculations will also be covered as well as practical problems in developed length, volume, area, triangulation and percentages.

BCV 0504 Plans, Blueprints and Isometrics

This course is designed to teach entry-level job skills and to familiarize students with common types of residential blueprints and pipe drawings on an isometric angle. Included in this course are wall construction and location, scale drawings, grade relationships, symbols, measurements, isometric drawings and piping review.

BCV 0523 Fixtures, Valves and Faucets

This course is designed to teach entry-level job skills and to familiarize students with various plumbing fixtures such as kitchen sinks, water closets, bathtubs, showers, hose bibbs, urinals and water coolers. Students will also be able to recognize and repair the major types and brands of faucets and valves.

BCV 0530 Plumbing Code 10-D-9/SSBC

Prerequisite: water supply/potable water systems and drain, waste and venting/sanitary layout and design, or consent of instructor. This course is designed to teach

entry-level job skills and to familiarize students with the rules and guidelines of the plumbing code (10-D-9) and the SSBC (Southern Standard Building Code). With the background of the previous courses along with any trade-related work, students will be able to apply code specifications where needed.

BCV 0570 Water Supply/Potable Water Systems

This course is designed to teach entry-level job skills and to equip students with the ability to design and layout potable water systems, types of material, use and size, routing and sizing of supply piping, supports and hangers. Also included will be the various types of shallow wells and circulating pumps, principles of using solar energy collector plates, storage tanks, valves and pumps.

BCV 0571 Drain, Waste and Venting/Sanitary Layout and Design

This course is designed to teach entry-level job skills and to equip students with the ability to design and layout sanitary drainage systems. Students will also learn types of venting systems, code-specified sizing based on 10-D-9, wet venting, common venting, combination waste and vent, utility and loop or circuit venting.

BCV 0600 Electricity I — DC Theory

This course is designed to teach entry-level job skills. Topics include concepts of work and energy, electrical terminology, Ohms Law and DC circuitry.

BCV 0601 Electricity II — AC Theory

This course is designed to teach entry-level job skills. Topics include test equipment, Ohms Law, principles of induction and capacitance, and the principles of magnetism/electromagnetism.

BCV 0629 Electricity III — Residential Wiring I

This course is designed to teach entry-level job skills. Topics include use of power and hand tools, electrical materials, blueprint reading and wiring techniques.

BCV 0630 Electricity V — Residential Wiring II

This course is designed to teach entry-level job skills. Topics include the National Electrical Code (NEC), blueprint interpretation for estimating and planning, installation and wiring of residential electrical circuits.

BCV 0660 Electricity IV — Commercial Wiring I

This course is designed to teach entry-level job skills. Topics include building plans and specifications, branch circuits, feeders, National Electrical Code (NEC) requirements for commercial installations, emergency power systems and special electrical systems.

BCV 0661 Electricity VI — Commercial Wiring II

This course is designed to teach entry-level job skills. Topics include commercial lighting, panelboard installations, National Electrical Code (NEC) requirements for calculations of commercial installations, low voltage lighting and cooling systems.

BCV 0662 Electricity X — Electrical Maintenance

This course is designed to provide training in the areas of electrical maintenance and troubleshooting. Topics include maintenance of the following: motors, controller, lighting systems, panelboards, loadcenters, distribution systems. Troubleshooting of the above maintenance items utilizing established methods and approaches.

BCV 0663 Electricity VIII — Motors and Controls

This course is designed to provide training in the areas of motors and motor control. Topics include: review of magnetism, magnetic contactors, motor theory, pneumatic timers and other control devices, as well as blueprint reading.

BCV 0664 Electricity VII — Industrial Wiring

This course is designed to teach entry-level skills. Topics include plans and site plans, National Electrical Code (NEC) requirements for industrial wiring, transformer installations and power distribution systems and equipment.

BRC 0100 Teller

This course is designed as entry-level job training to enable individuals to function efficiently on the job as new tellers. Also, tellers with experience can strengthen specific skills and become aware of the professional aspects of their jobs. Teller training can improve performance and attitudes towards coworkers and customers.

BRC 0101 Proof Operations/Financial Institutions

This course is designed as entry-level job training to enable individuals to quickly function on the job as proof operators in financial institutions and retail establishments.

BRC 0300 Fundamentals of Member Services/ Credit Union

In this customized course, students will quickly be able to function efficiently on the job as new Credit Union employees. Credit Union representatives will be strengthened in their everyday contact with credit union members. This course will provide an increased understanding of terminology and regulations applicable to credit unions, demonstrate security procedures and detecting of fraud; and enhance skills for effective communication with credit union members and co-workers.

BRC 0301 Foundation and Structure of Credit Unions

In this customized course, students will gain understanding of credit union history, structure, and regulatory environment. Included are individuals, events, laws, and organizations significant to the credit union movement. Instruction is also provided in the overall operation of credit unions as well as major issues confronting them. This course is intended for credit union employees only.

BRC 0311 Credit Union Accounting

In this customized course, students will acquire a basic knowledge of credit union bookkeeping. This course will give credit union people hands-on experience with the journalistic cycle of a credit union with specific examples of how to journalize entries, complete closing of books, and complete the necessary financial statements.

BRC 0321 Collection Techniques/Credit Union

In this customized course, students will gain basic knowledge of credit union collections and collection techniques. Skills to be addressed include organizing a collection department, making phone collections, following-up effectively, skiptracing, repossessing, and financial counseling. In addition, students will study bankruptcy and collection laws and regulations. This course is intended for credit union employees only.

BRC 0323 Consumer Lending/Credit Union

In this customized course, students will become familiar with various loan documents, e.g., applications, notes, and security agreements. Also addressed will be interviewing techniques, Federal Regulations B and Z, credit bureau reports, the financing of collateral items, real estate elements, and cross-selling techniques. This course is intended for credit union employees only.

BRC 0324 Mortgage Lending

This course will provide a basic introduction to the fundamentals of sound mortgage lending for credit unions, to include philosophy and the processing procedures required to administer a mortgage lending program in a credit union environment.

BRC 0325 Advanced Mortgage Lending

In this course, students will gain an understanding of and gain skills with the tools to process mortgage loans. How to deal with exceptions to the general rules, including the self-employed, will be mastered along with learning about private mortgage insurance and sources of funds for mortgage loans, this will include the sale of loans into the secondary market. An understanding of compliance issues will be gained and loan programs for low/moderate income borrowers will be explored as well as servicing mortgages and collection of delinquent mortgages.

BRC 0341 Financial Counseling/Credit Union

This is a customized course designed for credit union employees. Students will gain skills in personal financial counseling. Such skills will include interviewing, listening techniques, and problem solving. Instruction will also be provided in personal and family budgeting, debt management, dealing with creditors, developing a savings plan, and referral sources. Students will learn how to develop their own personal budget and will maintain a budget expense notebook during the school term. Assignments will deal with actual case problems. This course is intended for credit union employees only.

BRC 0342 Human Behavior/Credit Union

This customized course includes a study of human behavior psychology and human relations. Among the specific topics addressed are: understanding interests and desires of individuals; matters of personal and group adjustments; understanding self; and understanding credit union members. This course is intended for credit union employees only.

BRC 0353 Credit Union Marketing

In this customized course, students will gain knowledge of the role marketing plays within an organization. Topics

addressed will include what is 'marketing', product mix, the marketing environment today and tomorrow, and market segmentation. Also included will be market and member research, marketing mix, developing sales and service quality, marketing plan, advertising tools, marketing budget, and elements of a campaign. Through in-class work sessions, students will be required to complete a class project. This course is intended for credit union employees only.

BRC 0355 Effective Writing/Credit Union

This is a customized course in writing designed to teach students the requisite skills to edit their own writing for both style and content. These skills include five principles of editing as well as using style and organization for a purpose. Students will have class time experience in writing effective memos and letters. Also presented will be techniques of writing reports using materials provided. This course is intended for credit union employees only.

BRC 0356 Basic Business Mathematics/Credit Union

This course is designed to familiarize students with a wide range of business procedures for which mathematics is required in order to prepare them for business employment.

CJD 0254 Medical First Responder

Prerequisites: CJD 0710, CJD 0711, CJD 0730, CJD 0754, CJD 0734, CJD 0731, CJD 0712, CJD 0713, be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance test,) a medical examination, a polygraph test, drug screening, background investigation, physical performance test, oral interview, and be sponsored by a law enforcement agency or FCCJ. This course covers the first responder techniques needed in emergency medical situations. In lecture format the major types of communicable diseases among adults, signs and symptoms of each disease, and the methods of transmission are taught.

CJD 0704 Criminal Justice Defensive Tactics

Prerequisites: CJD 0710, CJD 0711, CJD 0730, CJD 0754, CJD 0734, CJD 0731, CJD 0712, CJD 0713, be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug screening, background investigation, physical performance test, oral interview and be sponsored by a law enforcement agency or FCCJ. This course covers techniques used for officers' personal safety and those necessary to subdue, search and transport resisting individuals. The use of restraining devices, impact weapons and pressure points are also covered. Objectives are addressed as specified by criminal justice standards and training commission.

CJD 0705 Criminal Justice Weapons

Prerequisites: CJD 0710, CJD 0711, CJD 0730, CJD 0754, CJD 0734, CJD 0731, CJD 0712, CJD 0713, be at least 19 years of age, have a valid drivers license, be an American citizen, driving history, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug screening, background investigation, physical performance test, oral interview and be sponsored by a law enforcement agency or FCCJ. This course covers

criminal justice weapons including instructions in the use of firearms, handguns and shot guns. Safety procedures and ammunition use are covered in lecture.

CJD 0710 Criminal Justice Legal I

Prerequisites: be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug screening, background investigation, physical performance test, oral interview and be sponsored by a law enforcement agency or FCCJ. This course provides an introductory overview of the criminal justice system and a history of law. The foundation and basic components of law are studied with specific focus upon officer application. Court procedure and testimony are also examined.

CJD 0711 Criminal Justice Legal II

Prerequisites: CJD 0710, be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug screening, background investigation, physical performance test, oral interview and be sponsored by a law enforcement agency or FCCJ. This course covers constitutional law. Its application to the public and officers is also examined. Law, including evidence procedures, arrest law, search and seizure, and various statutory laws that are common to police and correctional officers are studied. Emphasis is given to elements of various crimes. Various civil laws applications are also covered. Civil and criminal liability of officers is studied.

CJD 0712 Criminal Justice Communications

Prerequisites: CJD 0710, CJD 0711, CJD 0730, CJD 0754, CJD 0734, CJD 0731, be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug screening, background investigation, physical performance test, oral interview, and be sponsored by a law enforcement agency or FCCJ. This course covers the report-writing process from the interview statement taking and notetaking through the final report with practical exercises included. The difference between interviewing and interrogation are explored; interpersonal communication skills are covered along with radio and telephone procedures.

CJD 0713 Interpersonal Skills I

Prerequisites: CJD 0710, CJD 0711, CJD 0730, CJD 0754, CJD 0734, CJD 0731, be at least 19 years of age, have a valid drivers license, be an American citizen, driving history, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug screening, background investigation, physical performance test, oral interview and be sponsored by a law enforcement agency or FCCJ. This course covers community relations techniques and courtesy. With emphasis given to crime prevention the need of various groups within society are addressed. These include juveniles, the elderly, ethnic and cultural groups, mentally ill and retarded, the physically disabled and substance abusers. Intervention techniques for various situations including suicide, domestic violence and other

crises are studied with practical exercises. Stress recognition and reduction are included.

CJD 0723 Vehicle Operations

Prerequisites: CJD 0710, CJD 0711, CJD 0730, CJD 0754, CJD 0734, CJD 0731, CJD 0712, CJD 0713, be at least 19 years of age, have a valid drivers license, be an American citizen, driving history, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug screening, background investigations, physical performance test, oral interview and be sponsored by a law enforcement agency or FCCJ. This course covers the components of the police driving environment with practical exercises on the driving range. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

CJD 0730 Law Enforcement Legal III

Prerequisites: be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug screening, background investigations, physical performance test, oral interview and be sponsored by a law enforcement agency or FCCJ. This course covers various criminal laws and their elements. Emphasis is placed upon those laws specific to police application. Traffic and drivers license laws are studied. Legal considerations of officer vehicle operations are explored.

CJD 0731 Law Enforcement Patrol

Prerequisites: CJD 0710, CJD 0711, CJD 0730, CJD 0754, CJD 0734, be at least 19 years of age, have a valid drivers license, be an American citizen, driving history, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug screening, background investigations, physical performance test, oral interview and be sponsored by a law enforcement agency or FCCJ. This course addresses the skills and techniques that are needed by officers daily to do patrol tactics and respond to various types of calls. Methods of approach to various high-risk situations are explored with practical exercises included. Unusual occurrence events, including firefighting and crowd control are addressed.

CJD 0732 Law Enforcement Traffic

Prerequisites: CJD 0710, CJD 0711, CJD 0730, CJD 0754, CJD 0734, CJD 0731, CJD 0712, CJD 0713, be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug screening, background investigations, physical performance test, oral interview and be sponsored by a law enforcement agency or FCCJ. This course covers studies of traffic enforcement and control with the inclusion of DUI offenses and enforcement. Traffic accident investigation, scene management and reporting procedures are also studied.

CJD 0734 Law Enforcement Investigations

Prerequisites: CJD 0710, CJD 0711, CJD 0730, CJD 0754, be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph

test, drug screening, background investigations, physical performance test, oral interview and be sponsored by a law enforcement agency or FCCJ. This course addresses investigations of various crimes, including property crimes, person crimes, narcotics offenses, vice organized crime, terrorist activity, bombing incidents and death investigations. Techniques are developed from the initial observation method through the processing of the crime scene and case preparation. Florida's computer network is studied as an information source.

CJD 0741 Emergency Preparedness

Prerequisites: CJD 0710, CJD 0711, CJD 0730, CJD 0754, CJD 0734, CJD 0731, CJD 0712, CJD 0713, CJD 0704, CJD 0705, CJD 0732, CJD 0723, CJD 0254, be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug screening, background investigation, physical performance test, oral interview and be sponsored by a law enforcement agency or FCCJ. This course covers skills needed for riot and disturbance control and fire-fighting. Lecture includes methods of riot prevention and handling of unusual occurrences. Hostage situations and emergency procedures are also covered. Objectives are addressed as specified by the Criminal Justice Standards and Training Commission.

CJD 0750 Interpersonal Skills II

Prerequisites: CJD 0710, CJD 0711, CJD 0730, CJD 0754, CJD 0734, CJD 0731, CJD 0712, CJD 0713, CJD 0704, CJD 0705, CJD 0732, CJD 0723, CJD 0254, be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug screening, background investigation, physical performance test, oral interview and be sponsored by a law enforcement agency or FCCJ. This course covers an examination of inmate populations and techniques to supervise inmates. This module goes into greater detail and depth than Interpersonal I and concentrates on inmate societies, criminal types, institutional criminalities, inmate deception and manipulation, and female and male homosexual inmates.

CJD 0752 Correctional Operations

Prerequisites: CJD 0710, CJD 0711, CJD 0730, CJD 0754, CJD 0734, CJD 0731, CJD 0712, CJD 0713, CJD 0704, CJD 0705, CJD 0732, CJD 0723, CJD 0254, be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph test, drug screening, background investigation, physical performance test, oral interview and be sponsored by a law enforcement agency or FCCJ. This course will thoroughly investigate the daily operations within the confines of the correctional facility to include inmate intake, classification, safety release, accountability, movements/transfers, confinement, health care and feeding.

CJD 0754 Criminal Justice Physical Conditioning

Prerequisites: be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph

test, drug screening, background investigation, physical performance test, oral interview and be sponsored by a law enforcement agency or FCCJ. This course covers the conditioning process for criminal justice tactics and is addressed through assessment and lecture. Exercises in stretching, warm-up, conditioning and cool-down are practiced. Strength training and aerobics are also covered.

CJD 0770 Criminal Justice Legal I/Correctional Officer

Prerequisites: be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph, drug screening, background investigation, physical performance test, oral interview, and be sponsored by a law enforcement agency or FCCJ. This course will constitute the introductory phase of the legal requirement for certification eligibility by the commission on Criminal Justice Standards and Training.

CJD 0771 Criminal Justice Legal II/Correctional Officer

Prerequisites: CJD 0770, be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph, drug screening, background investigation, physical performance test, oral interview, and be sponsored by a law enforcement agency or FCCJ. This course is a continuance of Criminal Justice Legal I but goes into greater detail on specific topics such as Constitutional Law, Evidence Rules and Concepts, etc.

CJD 0772 Criminal Justice Communications/Correctional Officer

Prerequisites: CJD 0770, CJD 0771, be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph, drug screening, background investigation, physical performance test, oral interview, and be sponsored by a law enforcement agency or FCCJ. This course introduces students to the principles and rules of proper notetaking, taking statements, report writing and familiarization with communication equipment, radio codes and telephone procedures.

CJD 0773 Criminal Justice Interpersonal Skills I/Correctional Officer

Prerequisites: CJD 0770, CJD 0771, CJD 0772, be at least 19 years of age, have a valid drivers license, be an American citizen, complete the TABE (FCCJ entrance exam), a medical examination, a polygraph, drug screening, background investigation, physical performance test, oral interview, and be sponsored by a law enforcement agency or FCCJ. This course in interpersonal skills will cover such topics as human behavior, ethnic and cultural groups, mentally ill physically handicapped inmates, crisis intervention and stress reduction.

CJD 0780 Cross Over to Corrections

Prerequisite: completion of basic law enforcement program. This course supplies the additional competencies and objectives from Criminal Justice Legal I and II,

Criminal Justice Communications and Interpersonal Skills I necessary for students who have completed the Basic Law Enforcement program and are seeking to qualify for a corrections certificate.

CJD 0781 Cross Over to Law Enforcement

Prerequisite: completion of basic corrections program. This course supplies additional competencies and objectives from Criminal Justice Legal I and II, Criminal Justice Communications and Interpersonal Skills I necessary for students who have completed the basic corrections program and are seeking to qualify for a law enforcement certificate.

CJT 0800 Private Security Guard

This course is designed specifically for certification and training as class "D" guard and covers a variety of areas considered to be directly related to security work. Areas such as first aid, arrest techniques, and search and seizure are discussed.

COS 0080 Cosmetology I

Prerequisite: TABE, VPI 0100, VPI 0200 and VPI 0300 (as needed). This course provides students with the beginning theoretical principles and practical procedures of cosmetology. Manipulative skills, safety requirements and sanitary measures are presented. Students receive laboratory practice on mannequins and each other.

COS 0081 Cosmetology II

Prerequisite: COS 0080. This course provides students with the beginning theoretical principles and practical procedures of hair cutting and hair styling. Basic tasks performed will include finger waving, pin curl sets and selecting appropriate hair styles as well as combing techniques. Students will learn the relationship of shampooing, conditioning and chemical services. Hair cutting tasks will include low elevation cutting, selection of appropriate haircut and haircut checking.

COS 0082 Cosmetology III

Prerequisites: COS 0080 and COS 0081. This course, a continuation of Cosmetology II, provides students with additional hair cutting and hair styling techniques the introduction of the chemical service permanent waving and facial (including massage) procedures and techniques.

COS 0083 Cosmetology IV

Prerequisites: COS 0080, COS 0081 and COS 0082. This course, a continuation of Cosmetology III, provides students with the introduction of manicuring/pedicuring/nail extensions in both theoretical instruction and practical application. Also the chemical processes of hair tinting and bleaching are introduced. At this time students are made aware of industry standards applicable to seeking employment including application forms, resume preparation and the interviewing process. Florida cosmetology law is introduced and interwoven into lecture as applicable.

COS 0084 Cosmetology V

Prerequisites: COS 0080, COS 0081, COS 0082 and COS 0083. This course, a continuation of Cosmetology IV, provides students with the opportunity to perform previously

accomplished service techniques, procedures and applications in the clinic. The focus is to perform cosmetology services on patrons in a salon type environment. Students will review previously learned techniques, clinic procedures and responsibilities. Students will be presented with new material which includes the care, fitting and design of hairpieces and wigs, advanced permanent waving, chemical relaxers and reformation curls.

COS 0085 Cosmetology VI

Prerequisites: COS 0080, COS 0081, COS 0082, COS 0083 and COS 0084. This course, a continuation of Cosmetology V, provides students with advanced techniques in hair tinting and bleaching, and manicuring/pedicuring/nail extensions. There is ample time built into the schedule for additional review and practice as needed.

COS 0086 Cosmetology VII

Prerequisites: COS 0080, COS 0081, COS 0082, COS 0083, COS 0084 and COS 0085. This course, a continuation of Cosmetology VI, provides students with the opportunity to emphasize creativity, the mastering of new trends and the review and enhancement of all basic skills/techniques. New material to be introduced includes cosmetics and make-up, beauty salon management and advanced employability skills.

COS 0087 Cosmetology VIII

Prerequisites: COS 0080, COS 0081, COS 0082, COS 0083, COS 0084, COS 0085 and COS 0086. This course, a continuation of Cosmetology VII, offers students the daily performance and accumulation of services in addition to individualized instruction. New theoretical subject matter to be introduced includes Florida law and state board requirements governing cosmetology, an overview of entrepreneurship and beginning review for the state licensing exam.

COS 0088 Cosmetology IX

Prerequisites: COS 0080, COS 0081, COS 0082, COS 0083, COS 0084, COS 0085, COS 0086 and COS 0087. This course, a continuation of Cosmetology VIII, is a review and summarization of the preceding eight levels including practical and written theory and written practical evaluations. Emphasis will be placed on enhancing students' professional image, technical skills and human relation skills.

COS 0089 Cosmetology X

Prerequisites: COS 0080, COS 0081, COS 0082, COS 0083, COS 0084, COS 0085, COS 0086, COS 0087 and COS 0088. This course, a continuation of Cosmetology IX, provides practical application of employability skills and salon management with emphasis on final exam preparation. Students must demonstrate their understanding and technical skills by achieving 85 percent or better on written and practical exit exams.

COS 0500 Barber-Styling I

Prerequisites: TABE, VPI 0100, VPI 0200 and VPI 0300. This course provides students with beginning theoretical and practical procedures of barbering. The basic topics and tasks to be performed are history of barbering, professional image and ethics, bacteriology, sterilization and

sanitation, safe and efficient work practices, implements, tools and equipment, skin, scalp and hair structure, disorders and treatments of hair and skin, and massage and facial treatments.

COS 0510 Barber-Styling II

Prerequisite: COS 0500. This course provides students with beginning theoretical and practical procedures of barbering. Basic topics and tasks to be performed are draping, shampooing and rinsing, shampoos, conditioners and rinses, men's hair cutting and hair styling, shaving, beard and mustache trims, women's hair cutting and hair styling.

COS 0520 Barber-Styling III

Prerequisites: COS 0500 and COS 0510. This course is a continuation of Barber-Styling II. Students will be introduced to non-chemical and chemical hair processing and hair designing techniques as they continue to perfect their skills. Students will demonstrate their understanding and technical skill abilities by achieving 85 percent or better on a written and practical final exam prior to participating in Barber-Styling IV. This course includes instruction in air-waving, curling iron techniques, fingerwaving and permanent waving.

COS 0530 Barber-Styling IV

Prerequisites: COS 0500, COS 0510 and COS 0520. This course is a continuation of Barber-Styling III with emphasis on chemical processes and includes theoretical instruction and practical hands-on training in chemical hair relaxing, soft curl permanents, hair coloring and bleaching, and wig and hairpiece fitting and care.

COS 0540 Barber-Styling V

Prerequisites: COS 0500, COS 0510, COS 0520 and COS 0530. This course provides students with theoretical and practical review and application of all topics and tasks. Students will follow clinic floor procedures by performing reception desk and sanitation duties and by consulting with the instructor prior to a client service, following instructions during a service and by having the finished service checked by the instructor for approval. Students will also maintain service record sheets to record the number of services performed on clients as recommended by DBPR.

COS 0550 Barber-Styling VI

Prerequisites: COS 0500, COS 0510, COS 0520, COS 0530 and COS 0540. This course is a continuation of Barber-Styling V with the focus on theoretical and practical review of all topics and tasks.

COS 0551 Barber-Styling VII

Prerequisites: COS 0500, COS 0510, COS 0520, COS 0530, COS 0540 and COS 0550. This course offers students continuation of the daily performance and accumulation of services in addition to the availability of individual instruction. New theoretical subject matter to be introduced includes the development of barber management skills, the demonstration of employability skills, a knowledge of State Board requirements, rules and regulations, and an understanding of entrepreneurship.

COS 0552 Barber-Styling VIII

Prerequisites: COS 0500, COS 0510, COS 0520, COS 0530, COS 0540, COS 0550 and COS 0551. This course provides practical applications of employability skills, shop management, entrepreneurial responsibilities and applied Florida law statutes. Students will continue in the daily performance and accumulation of required services.

COS 0590 Professional Barber-Styling I

Prerequisites: COS 0500, COS 0510, COS 0520, COS 0530, COS 0540, COS 0550, COS 0551 and COS 0552. This course provides a culmination of the previous levels in practical and theoretical areas with special emphasis applied to state board examinations preparation. Additionally, students will address enhancing their professional image and human relation skills. Students must demonstrate their understanding and technical skills by achieving 85 percent or better on written and practical exit exams and by performing the minimum number of services required by DPR prior to applying for state licensure testing.

COS 0591 Professional Barber-Styling II

Prerequisites: COS 0500, COS 0510, COS 0520, COS 0530, COS 0540, COS 0550, COS 0551, COS 0552 and COS 0590. This course is a continuation of Professional Barber-Styling I for the purpose of preparing for Florida state board examination. An employment search conducted by students will be considered a performance standard.

COS 0930 Selected Topics in Cosmetology

The open format of this course provides an opportunity to address various selected topics in cosmetology. This course will provide students with any additional hours required for certification. Topics will be selected based on students' needs.

COS 0931 Selected Topics in Barbering

The open format of this course provides an opportunity to address various selected topics in barbering. This course will provide students with any additional hours required for certification. Topics will be selected based on student needs.

CSP 0010 Cosmetology Specialist — Nails

This course provides students with a minimum of 240 hours of theory instruction, laboratory experiences and the practical application of manicuring, pedicuring and nail extension services. Following the completion of 95 services and the achievement of 85 percent or better on written and practical tests, students will be issued a certificate of completion by FCCJ in order to qualify for state board certification of this specialty course.

DEA 0001 Introduction to Dental Assisting

This course consists of an orientation to the dental profession, terminology, specialties in dentistry and basic human anatomy, supporting structures and development, basic microbiology and sterilization with lecture demonstration and laboratory.

DEA 0021 Preclinical and Clinical Dental Assisting

This course covers the preclinical and clinical theory and practices of dental assisting including basic procedures for dental set-ups, operative preparations, handling of equipment, instruments, supplies, sterilization procedures, anesthesia and pharmacology, oral pathology and OSHA guidelines.

DEA 0029 Dental Specialties

This course consists of preventative dentistry, operative dentistry, endodontics, oral surgery, pedodontics, periodontics, prosthodontics and orthodontic procedures, techniques, instrumentation, chairside assisting, two and four-handed dentistry, and therapeutic and restorative procedures.

DEA 0201 Office Management and Procedures

This course consists of dental office procedures and management principles including clinical records, recall systems, filing, written communications, appointment control, telephone techniques, supply and inventory, insurance, bookkeeping, computers, human relations, banking, billing, collections, ethics and jurisprudence.

DEA 0805 Dental Externship

Prerequisite: A current Basic Life Support (CPR) certificate (eight hour course) must be completed prior to registering for this course. This course consists of the properties of dental materials and their use in chairside procedures and the expanded duties, authorized by the board of dentistry.

DES 0103 Dental Materials and Expanded Duties

This course consists of the properties of dental materials and their use in chairside procedures and the expanded duties authorized by the board of dentistry.

DES 0204 Radiology

This course consists of the theory, use and hazards of radiation in dentistry, the bisecting and parallel techniques, development and darkroom techniques and safety procedures and processing and mounting of X-rays, identification of landmarks and pathologies.

DIM 0001 Introduction to Diesel Engines

This course is designed to teach entry-level job skills in diesel engines. Topics include diesel engine basic components, engine performance and cycle of operation, an overview on combustion chambers, tools and equipment, engine oils and diesel fuel. Special emphasis will be placed on safety procedures.

DIM 0135 Cummins Diesel Engine Overhaul

This course is designed to teach entry-level job skills in the overhaul and repair of Cummins diesel engines and their components. Topics include service manual utilization, engine disassembly, use of precision measuring instruments, engine systems theory, engine assembly and run-in procedures. Special emphasis will be placed on safety and manufacturer's overhaul procedures.

DIM 0137 Detroit Diesel Engine Overhaul

This course is designed to teach entry-level job skills in the overhaul and repair of Detroit diesel engines and their components. Topics include service manual utilization, engine disassembly, use of precision measuring instruments, engine systems theory and engine assembly and run-in procedures. Special emphasis will be placed on safety and manufacturer's overhaul procedures.

DIM 0141 John Deere Diesel Engine Overhaul

This course is designed to teach entry-level job skills in the overhaul and repair of John Deere diesel engines and their components. Topics include service manual utilization, engine disassembly, use of precision measuring instruments, engine systems theory, engine assembly and run-in procedures. Special emphasis will be placed on safety and manufacturer's overhaul procedures.

DIM 0143 Caterpillar Diesel Engine Overhaul

This course is designed to teach entry-level job skills in the overhaul and repair of Caterpillar diesel engines and their components. Topics include service manual utilization, engine disassembly, precision measuring instrument use, engine assembly and run-in procedures, and engine system theory. Special emphasis will be placed on safety and manufacturer's overhaul procedures.

DIM 0151 Maintenance and Troubleshooting of Diesel Engines I

This course is designed to teach entry-level job skills on the performance of proper maintenance, tune-up and troubleshooting procedures on auxiliary marine diesel engines. Emphasis will be placed on fuel injection and lubricating systems, adjusting valves, removing and testing fuel injectors, solving engine problems and test running an engine on Westerbeke/Perkins engines.

DIM 0152 Maintenance and Troubleshooting of Diesel Engines II

Prerequisite: DIM 0151 or consent of instructor. This course is a continuation of Maintenance and Troubleshooting of Diesel Engines I and is designed to provide practical experience and entry-level job skills to perform an engine tune-up on a Detroit Diesel 8V-71 and Caterpillar 1100 series diesel engine. Topics include exhaust valve clearance, governor gaps, no-load speed, idle speed, injection timing valves and buffer screws. Injection testing, timing and adjustments will also be covered.

DIM 0153 Maintenance and Troubleshooting of Diesel Engines III

Prerequisite: DIM 0152 or consent of instructor. This course is a continuation of Maintenance and Troubleshooting of Diesel Engines II and is designed to teach entry-level job skills on the performance of proper maintenance, tune-up, and troubleshooting procedures on diesel engines. Emphasis will be placed on fuel injection and lubricating systems, adjusting valves, removing and testing fuel injectors, solving engine problems, and test running an engine. Emphasis is on Cummins, John Deere and Mitsubishi diesel engines. Special emphasis will be placed on proper safety procedures.

EER 0471 Electricity IX — Industrial Electronics

This course is designed to provide students with the basic understanding and knowledge of electronic devices used in industry. Topics include power supplies, logic gates, semi-conductor theory, op-amps, opto-isolators, proximity switching devices, 55 timers, and other devices.

EER 0531 FCC General Radiotelephone License Exam Preparation

This course is designed to teach entry-level job skills and advanced skills required to pass the Federal Communications Commission General Radio-Telephone License examination. Topics include receivers, transmitters, antennas, tests and measurements as well as the applicable FCC rules and operating procedures.

EER 0532 Radio Operation Procedures

This entry-level job course is designed to teach skills in the operation of two-way radio communications equipment and electronic navigation equipment. Operator rules of the Federal Communications Commission are included.

EER 0541 Electronic Communication Systems

Prerequisite: EER 0532. This course is designed to teach entry-level job skills. Topics include the layout and design of communications transceiver systems, the theory of operation of electronic navigation systems and the operation of fiber-optics systems.

EER 0571 Troubleshooting Procedures for Communications Equipment

Prerequisite: EER 0541. This course is designed to teach entry-level job skills in electronic troubleshooting. The use of test equipment including multimeter, signal generators, oscilloscope and transmitter tuning equipment is emphasized along with the application of troubleshooting procedures.

EEV 0031 DC/AC Fundamentals

This course and lab are designed to introduce the basic concepts of DC and AC electricity. The course topics include electrical properties and measurements, circuit configurations and component familiarity. Students will develop skills with computer analysis and simulation. Hands-on lab experiences reinforce the course topics.

EEV 0332 Electricity XI — Introduction to PLCs

This course is designed to provide students with the knowledge necessary to comprehend the basic theory and operation of programmable logic controllers (PLCs) in an industrial environment.

EEV 0441 Electricity XII — PLC Programming

This course is designed to provide students with the necessary skills to perform actual programming for the operation of functional equipment in the lab.

EEV 0443 Industrial Process Control

Prerequisites: EEV 0814, EEV 0816 and ETI 0843. This course is designed to introduce students to industrial measurement, control and automation. The course topics include

transducers, control devices and circuits, microprocessor-based control and hands-on experience with programmable logic controllers. Laboratory experiences reinforce course topics.

EEV 0531 Computer Architectures

This course covers the system architectures of the most commonly used computer systems. The course will include preventative maintenance, troubleshooting, computer buses, and the use of system-level diagnostic software among other topics. Special emphasis shall be placed on the assembly, reassembly, major components, and compatibility issues related to various microcomputer architectures.

EEV 0533 Operating Systems and Environments

This course is designed to familiarize students with computer operating systems and software packages that run on top of the operating system which determines the computing environment. The course includes detailed instruction on installing, configuring, operating and writing batch files, as well as installing, configuring, and operating in popular operating system environments. Troubleshooting common problems in these operating systems and associated environments will receive special emphasis.

EEV 0534 Memory and Storage Devices

Prerequisites: EEV 0531 and EEV 0533. This course is designed to familiarize students with various memory concepts and configurations of microcomputers. Students will also be familiarized with storage devices such as hard drives, tape drives, floppy disk drives, optical drives, etc. Special emphasis shall be in installing, configuring, troubleshooting, and repairing memory and storage devices.

EEV 0535 Computer Networks

Prerequisites: EEV 0531, EEV 0533 and EEV 0534. This course is designed to familiarize students with computer networks, network operating systems, and troubleshooting and repair of computer network equipment. Special attention will be given to installation of a network including loading applications onto the network.

EEV 0536 Printers and Peripherals

Prerequisites: EEV 0531 and EEV 0533. This course is designed to familiarize students with various peripheral equipment including printers and modems, communication standards, and communication concepts. Special emphasis shall be in installing, configuring, troubleshooting, and repairing printers and peripheral equipment including the software programs and drivers needed to make them work.

EEV 0539 Certification Preparation and Customer Support

Prerequisites: EEV 0531, EEV 0533, EEV 0534 and EEV 0536. This course is designed to prepare students for the A+ Microcomputer Repair Certification and the Novell NetWare Administrator Certification exams. Furthermore, the course will prepare students in written, oral, and non-verbal communication skills needed for microcomputer support.

EEV 0623 Basics of Instrumentation

This course is designed to teach the necessary knowledge and understanding of the basics of instrumentation. Topics included are principles of hydraulics and pneumatics, the relationships of measurement, control and processes and pneumatic devices.

EEV 0624 Instrumentation Process Measurement and Control

This course is designed to teach the basic knowledge and understanding of measurement, processes, and control used in industry. Topics include control loops, feedback loops, measurement devices, both pneumatic and electronic, control loop adjustment and combination control systems.

EEV 0625 Instrumentation for Manufacturing

This course is designed to teach students the basics of automated manufacturing processes. Topics include programmable logic controllers, PID loops, material handling processes, physical, chemical, and electronic principles necessary for electronic sensors to measure changes in physical phenomena.

EEV 0626 Maintenance of Instrumentation

This course is designed to teach the necessary knowledge and skills to properly perform the following identification, repair, and replacement of defective parts or inoperative systems, calibration and adjustments, troubleshooting techniques, and usage of various test equipment.

EEV 0813 Solid-State Devices

This course is designed to teach entry-level job skills and to familiarize students with the major semiconductor devices used in electronics. Topics include vacuum tube basics, solid-state diodes, bipolar and field-effect transistors, thyristor devices and the fundamentals of integrated circuits. Laboratory experiences reinforce course topics.

EEV 0814 Analog Circuits

Prerequisite: EEV 0813. Corequisite: ETI 0843. This course is designed to teach entry-level job skills and to familiarize students with typical analog circuits. Topics include multistage small-signal and power amplifiers, linear integrated-circuits, operational amplifiers, power supplies, oscillators and modulation techniques. Laboratory experiences reinforce course topics.

EEV 0815 Digital Fundamentals

Prerequisite: EEV 0814 or consent of instructor. This course is designed to teach entry-level job skills and to familiarize students with digital techniques. Course topics include number systems and codes, combinational and sequential circuits, Boolean algebra, encoders, displays and troubleshooting. Laboratory experiences reinforce course topics.

EEV 0816 Microprocessor Fundamentals

Prerequisite: EEV 0815 or consent of instructor. This course is designed to teach entry-level job skills and to familiarize students with microprocessors. Topics include machine and assembly level programming and interfacing

techniques using the 6800 MPU. Other popular processors will also be discussed. Laboratory experiences reinforce course topics.

EEV 0822 Soldering, Board Fabrication, and Equipment Repair

Prerequisites: EEV 0814 and EEV 0815. This course is designed to provide students with hands-on skills in soldering, printed circuit board fabrication and effective diagnosis of malfunctions in electronic equipment. Students will practice these skills in the maintenance of lab test equipment.

ETI 0843 Motors, Generators and Transformers

Corequisite: EEV 0814. This course is designed to teach entry-level job skills in the variety of AC and DC motors, generators and transformers typical in industry. Topics include single phase and three-phase transformers and AC motors, generation of DC and AC, and DC motors.

EVS 0133 Water Treatment Plant Operation C

This course is designed to prepare students to pass the state of Florida exam for water treatment operator level "C."

EVS 0143 Water Treatment Plant Operation B

Prerequisite: EVS 0133. This course is designed to prepare students to pass the state of Florida exam for water treatment operator level "B."

EVS 0153 Water Treatment Plant Supervisor — Level A

Prerequisites: EVS 0133 and EVS 0143. This course is designed to prepare students to pass the state of Florida exam for water treatment facility supervisor level "A."

EVS 0333 Wastewater Treatment Plant Operation C

This course is designed to prepare students to pass the state of Florida exam for wastewater treatment operator level "C."

EVS 0343 Wastewater Treatment Plant Operation B

Prerequisite: EVS 0333. This course is designed to prepare students to pass the state of Florida exam for wastewater treatment operator level "B."

EVS 0353 Wastewater Treatment Plant Supervisor — Level A

Prerequisite: EVS 0333 and EVS 0343. This course is designed to prepare students to pass the state of Florida exam for wastewater treatment facility supervisor level "A."

FFP 0005 Fire Fighting

Prerequisites: complete the FCCJ placement test, a physical examination, fingerprint, drug screening, tobacco-free for one year and have an earned high school diploma or GED diploma. This course is designed to prepare students for certification and initial employment as firefighters in the state of Florida. Successful course completion will qualify students to take minimum standard written, oral and practical examinations as administered by the Bureau of Fire Standards and Training. Note: This course is restricted to individuals with intent of employment by state of Florida fire departments.

FSS 0202 Food Production I

Students will acquire knowledge and skill in the preparation of food. Included are basic principles and techniques of food preparation, management of resources, use of recipes, use and care of equipment and evaluation of food products. The course emphasizes safety and sanitation practices. This course is for Dietetic Management and Supervision students only. Students must have the permission of the program manager. Students are required to have knives, books and uniforms.

FSS 0223 Food Preparation Worker I

Prerequisite: TABE test. This course introduces students to basic knowledge and skills including communication and math required of food preparation workers. Students identify career and job opportunities, examine and practice employability skills, and function as team members. Students develop safety and sanitation habits and usages and care for commercial tools and equipment. Students prepare basic food and beverage items, and practice front-of-the-house skills.

FSS 0224 Food Preparation Worker II

Prerequisite: FSS 0223. This second introductory course expands students' basic knowledge and skills as food preparation workers by developing personal productivity skills and safe and sanitary practices. Students utilize basic recipes, apply nutrition principles, prepare basic food and beverage items and practice front-of-the-house skills. Students will develop skills as cooks, waiters and waitresses.

FSS 0225 Food Production Worker III

Prerequisite: FSS 0224. This course is a continuation of Food Preparation Worker II and includes further exploration of career and job opportunities, continued basic skill development, safety and sanitation and use of recipes. Students will also have front-of-the-house training/responsibilities and will prepare food and beverage items. Students will develop skills as kitchen, baker helper and cashier.

FSS 0226 Food Production Worker IV

Prerequisite: FSS 0225. This course is a continuation of Food Preparation Worker III and includes career and advancement opportunities in cooking and baking. Instruction will be provided for identification, selection and purchase of food products; advanced cooking and baking techniques; scientific principles in cooking and baking; and quality standards. Time, energy and resource management technique will be used. Communication and math skills will be further developed and utilized in performance of laboratory/class activities. Students will develop skills as institutional or cafeteria cooks.

FSS 0227 Food Production Worker V

Prerequisite: FSS 0226. This course is a continuation of Food Preparation Worker IV and includes career and advancement opportunities in professional cooking and baking. Food identification, selection and purchasing skills will be enhanced and advanced cooking and baking techniques will be performed. Time, energy and resource management techniques will be further utilized while maintaining

quality standards in food production. Math and communication skills will be emphasized. Students will develop skills as bakers and cooks in restaurant food service.

FSS 0930 Food Service Internship

Prerequisite: TABE test. Students will participate in work related experience in the food service industry. Student interns will demonstrate occupational preparation and work habit as prescribed from course theories and labs.

GRA 0441 Theory of Printing Processes

This course is designed to introduce students to major processes of the printing industry. All methods of typesetting including photo typesetting, mechanical art preparation, printer's math and proofreading are included in the course.

GRA 0442 Theory of Lithographic Processes

This course is designed to teach entry-level job skills. It is a lecture course designed to give an introduction to three major processes of the lithographic industry. Process camera operation, negative stripping and platemaking, and offset press operation are included.

GRA 0446 Cold Type Typesetting and Pasteup

This course is designed to teach entry-level job skills. It provides skill development in the technique of setting type by photographic typesetting equipment and also the preparation of mechanical art forms. Emphasis is placed on the application of basic techniques toward greater job complexity, increased quality and increased productivity.

GRA 0451 Camera Operation and Film Processing

This course is designed to teach entry-level job skills. It provides skill development in the technique of operating the process camera for the reproduction of line and halftone copy negatives, contact printing, preparation of darkroom chemicals, and developing graphic arts films and papers.

GRA 0473 Negative Stripping and Platemaking

This course is designed to teach entry-level job skills. It provides skill development in the technique of setting up offset negatives and positives for proper press positioning, separating for color, and exposing and developing offset press plates.

GRA 0474 Offset Press Operation

This course is designed to teach entry-level job skills. It provides skill development in the technique of setting up, operating, and maintaining duplicators and offset presses in the 10x15, 11x17, 15x18 and 14x20 inch ranges.

HCP 0102C Nursing Assistant

Prerequisites: HCP 0605 and completion of 10th grade, 18 years of age, health clearance, and completion of basic course in cardiopulmonary resuscitation. This course is designed to prepare a non-professional worker with minimal skills and knowledge to perform carefully selected patient care activities, in a nursing home or hospital under direction of the Registered Professional Nurse. Upon successful completion the graduate will be eligible to write the State of Florida Examination to become a Certified Nurse Assistant.

Course content includes classroom activities, simulated laboratory experiences and hands-on experience in a designated clinical agency.

HCP 0311 Home Health Aide A

Prerequisites: HCP 0605, HCP 0102C, completion of 10th grade, 18 years of age, health clearance, and completion of a basic course in cardiopulmonary resuscitation. This course is designed for job entry level training with emphasis placed upon the care of the client in the home environment. Family differences and ethical safe practices will be stressed. Common incapacitating conditions will be discussed in addition to procedures for assisting the client and his family to cope with limitations and stress. Instruction is limited to those supportive services required to assist the client toward independent living in a safe environment. The role of the Home Health Aide as an assistant to, and under direction of, the Registered Nurse is emphasized.

HCP 0312 Home Health Aide B

Prerequisites: HCP 0605 and completion of 10th grade, 18 years of age, health clearance, and completion of a basic course in cardiopulmonary resuscitation. This course is designed as entry level job training for Home Health Aides only. Emphasis is placed upon the care of the client in the home environment. Family differences and ethical safe practices will be stressed. Common incapacitating conditions will be discussed in addition to procedures for assisting the client and his family to cope with limitations and stress. Instruction is limited to those supportive services required to assist the client toward independent living in a safe environment. The role of the Home Health Aide as an assistant to, and under direction of, the Registered Nurse is emphasized.

HCP 0400 Patient Care Assistant

Prerequisites: HCP 0605, HCP 0102C, HCP 0311, completion of 10th grade, 18 years of age, health clearance, and completion of a basic course in cardiopulmonary resuscitation. This course includes knowledge and skills relating to various client care activities and associated non-professional services necessary in caring for the personal needs and comfort of clients in non-complex situations. This care may be given in a general hospital, a nursing home or the home of the client. Family differences and ethical, safe practices will be stressed and instruction is limited to those supportive services necessary to assist the client toward independent living in a safe environment. The role of patient care assistants as assistants to, and under direction of, the registered nurse is emphasized. Upon successful completion, graduates will be able to take the state of Florida examination to become certified nursing assistants and will also be eligible to function as home health care aides.

HCP 0401 Electrocardiograph Aide

This course is designed to teach the cardiovascular system, cardiovascular wellness and rehabilitation, and the application of medical instrumentation modalities. Students enrolled in this course will have completed the patient care assistant competencies and are adding skills to be cross-trained to perform basic electrocardiograph patient care techniques.

HCP 0402 Phlebotomist

This course is designed to teach students about the services provided by a phlebotomist. Students will learn to identify anatomic structures, collection reagents, supplies, and equipment requisite to perform phlebotomy. Students enrolled in this course will have completed the patient care assistant competencies and are adding these skills to be cross-trained to perform basic blood drawing (phlebotomy) techniques.

HCP 0403 Allied Health Assistant

This course provides skills and clinical experiences specific to the allied health areas. Students enrolled in this course have completed the patient care assistant competencies and are adding these skills to be further cross-trained with skills representative of one to three of various allied health areas (i.e. respiratory, occupational therapy, health unit coordinator, emergency).

HCP 0404 Patient Care Technician

This course is designed to focus on developing the organizational and management skills to practice in a clinical setting. Students enrolled in this course must have completed all modules in the patient care technician program. Students will be prepared as cross-trained, unlicensed health care workers.

HCP 0605 Health Careers Core

This course will cover basic entry-level information, preparing individuals for further training in health-related occupations. Students will be introduced to basic concepts such as the health delivery system, wellness and disease, environmental safety, communication and nutrition.

HEV 0111 Child Care Aide I

This course is initial training for students to become aides in child day care centers. The curriculum includes and expands upon the HRS 30-hour state child care worker training courses, child growth and development, employability skills, professionalism, clerical duties and includes supervised field experiences.

HEV 0112 Child Care Aide II

Prerequisite: HEV 0111 or consent of professor. This course continues entry-level training for students to become aides in child care centers. It includes and expands upon the HRS infant-toddler and special needs 10-hour courses. It emphasizes the planning of developmentally-appropriate program activities and includes supervised field experience.

HEV 0113 Child Care Supervision

This course is designed to prepare students for employment within the child care industry as teachers or substitutes in child care centers. The child care supervision program is approved by HRS as an equivalency to the Child Development Associate (CDA) credential.

HEV 0114 Child Care Center Operations

This course is designed to prepare students for employment within the child care industry, either as family child care home operators, child care center workers or as substitutes in child care centers. The focus of the curriculum is

entrepreneurial and includes all HRS required child care training modules.

HEV 0152 Child Care Aide — Professionalism

Prerequisites: HEV 0111 and HEV 0112 or consent of professor. This course continues entry-level training for students to become child care center aides. It emphasizes work relationships, community resources, employability skills, professionalism and career planning. A supervised field experience fosters practical application of classroom instruction.

HEV 0201 Basic Textiles

This course consists of a study of fabrics used for clothing and home furnishings. Emphasis will be on fibers, yarns, constructions, designs and finishes that determine the qualities and performance of a fabric. Use and care of fabrics and cost factors also will be included.

HEV 0202 Introduction to Clothing Construction

This course includes the selection and use of commercial patterns; simple alterations; selection, use and care of modern sewing and pressing equipment; planning and construction of garments, and developing basic construction skills. The course also includes the selection of suitable accessories.

HEV 0204 Basic Clothing Construction

Prerequisite: HEV 0202. This course includes a study of more difficult construction techniques and of fabrics more difficult to handle than were used in Basic Clothing Construction.

HEV 0206 Advanced Clothing Construction

Prerequisite: HEV 0202 or equivalent. This course presents to the participants the problems encountered in fitted garments construction. Students will exhibit skill in figure analysis, pattern alterations and advanced clothing construction techniques.

HEV 0211 Alterations for Special Needs and Population

This course is designed to develop competencies in fitting and altering garments for special needs individuals and specialty garments such as swimwear, lingerie and evening wear.

HEV 0212 Custom Garment Making I

Prerequisite: HEV 0206. This course is designed to build on the skills and competencies developed in Advanced Clothing Construction. Techniques and skills for constructing more difficult patterns and using knitted fabrics will be developed.

HEV 0213 Flat Pattern Design

This course is designed for students with prior clothing construction experience who are interested in creating their own designs. Students will develop competencies in applying the basic elements and principles of design to designing and constructing a garment through creating their own pattern.

HEV 0214 Custom Garment Making II

Prerequisite: HEV 0212. This course is designed to build on the skills and competencies developed in Custom Garment Making I. Also included will be supplementary skills and techniques addressing working with specialty garments.

HEV 0215 Custom Garment Making III

Prerequisite: HEV 0214. This course is designed to develop tailoring techniques for coats and jackets. Topics include construction processes, assembly procedures, selection of fabrics and notions, fabric cutting and finishing techniques.

HEV 0216 Wardrobe Planning and Updating

This course provides for the development of competency in planning individual and family wardrobes. Factors to consider in purchasing wardrobe items are stressed as well as the care, maintenance and updating of various wardrobe components. Emphasis will be placed on the psychological and social factors influencing dress and the relationship of physical appearance to clothing selection. Attention will be given to the effectiveness of clothing choices in professional situations. The course includes experiences in the application of elements and principles of design to wardrobe coordination.

HEV 0217 Alterations III

Prerequisite: HEV 0237. This course is designed to develop competencies in advanced fitting, altering and repairing garments.

HEV 0236 Alterations I

This course is designed to develop basic competencies in the alterations and repair of simple garments. Included will be the use of domestic machines as well as selected commercial equipment.

HEV 0237 Alterations II

Prerequisite: HEV 0236. This course is designed to further develop competencies in fitting, altering and repairing garments.

HEV 0239 Retail Salesmanship

This course provides students with an in-depth understanding of the personal selling process as it specifically relates to applied design and marketing sales. Emphasis will be on successful personal selling techniques, multiple and suggestive selling, and personal service as related to the merchandising of clothing apparel, food, floral designs, interior fashions, and the sale of hair and body products.

HEV 0264 Career Development for the Garment Industry

This course is designed to provide students with an understanding of potential employment opportunities. Students will develop practical employment application competencies in resume writing, conducting a job search, interviewing, personal appearance, professional association membership and human relations skills.

HEV 0280 Apparel/Accessory Evaluation

This course is designed to provide students with a method to evaluate the quality of ready-to-wear apparel and accessories. Students will be able to analyze the quality of the material, construction and design of these products in all price ranges to determine the feasibility and cost of alterations.

HEV 0331 Entrepreneurship for Applied Design and Marketing Occupations

This course is designed for students who are interested in small business ownership and management in areas related to applied design and marketing. In this course, students will learn the techniques of starting a new business venture. Topics include essentials for planning, financing, location, layout, merchandising, microcomputers in small business, taxes, insurance and small business, and the law.

HEV 0940 Child Care Aide Internship

Prerequisites: HEV 0111, HEV 0112 and HEV 0152 or consent of professor. This course is optional for students who have successfully completed the child care assisting program (795) and who have satisfactory basic skills test scores. Students will be placed in appropriate child care centers throughout the city. They will be supervised by a faculty member and have an opportunity to put into practice those instructional and child care techniques that they have learned in class.

HEV 0941 Internship I

This course, a supervised on-the-job training course, requires students to work a minimum of 200 hours over a 15 week period in an approved facility. This co-operative educational experience will provide students the opportunity to practically apply knowledge gained in prerequisite courses. The instructor will make on-site visitations to monitor students' progress and performance. There will be a two-hour on campus seminar every other week during this internship.

HEV 0942 Internship II

Prerequisite: HEV 0941. This course is a continuation of Internship I providing on-the-job training and practical experience in an approved facility.

HEV 0943 Internship III

This course is a continuation of Internship II, providing in-depth, on-the-job training and practical experience in an approved facility.

HFT 0150 Travel Agency Operations

Students will gain entry-level skills for working in travel agency operations. Such skills will include developing tours, ticketing, tour counseling and accounting. Students will have hands-on experience with an IBM PC simulated system as they learn how to make reservations for flights, hotels, tours and cruises. Instruction will also include world geography. Students must also complete HMV 0033, Destination Geography to receive Travel Agent Operations certificate.

HFT 0180 Supervision and Personnel Management

Students will develop and demonstrate skills necessary to perform the managerial procedures and functions of a food service operation. Emphasis will be placed on personnel selection, interviewing, evaluating, communicating and wage determination. Actual case studies will be utilized in this course. This course is for Dietetic Management and Supervision students only. Students must have the permission of the program manager.

HMV 0033 Destination Geography

This course is a study of worldwide travel destinations in terms of location, culture, and physical characteristics. Emphasizing itinerary planning, students will examine economic conditions, environmental conditions, attractions, accommodations, and transportation. Tourism facilities, seasonal events, historical and artistic displays will be specified. Students must also complete HFT 0150, Travel Agency Operations to receive Travel Agent Operations certificate.

HUN 0200 Human Nutrition

Students will acquire the basic principles of nutrition and develop skills in applying the recommended dietary allowances to all age groups. The course emphasizes key food nutrients, consumer information regarding food economy, quality food purchasing and maximum nutrition for the life cycle. This course is for Dietetic Management and Supervision students only. Students must have permission of program manager.

HUN 0203 Principles of Nutrition

This course includes a study of the basic principles of nutrition and the relation of food selection to health. The aim is to interpret nutrition in terms of its practical application in the planning, preparing and serving of meals and relating these meals to the other food for the week. The course will develop an understanding of daily dietary allowances necessary for various age groups and the planning of these requirements in the daily/weekly diet. Also included is information on foods with maximum nutritive value and how to purchase, store and prepare these foods in order to retain maximum nutritive value. This course is for Dietetic Management and Supervision students only. Students must have permission of the program manager.

IDS 0010 Basic Skills I

Corequisite: the first of a non-college entry-level job training course offered at the Downtown Campus or consent of instructor. This course is designed to provide the basic academic skills necessary for completion of the first course in the occupational programs offered at the Downtown Campus. Following pretesting and assessment, students will be provided with individualized instructional plans to upgrade mathematics and reading skills.

IDS 0011 Basic Skills II

Prerequisite: IDS 0010 or consent of the instructor. Corequisite: enrollment in a non-college entry-level job training course offered at the Downtown Campus or consent of the instructor. This course is designed to provide the basic academic skills necessary for completion of the second course in the occupational programs offered at Downtown

Campus. Following pretesting and assessment, students will be provided with individualized instructional plans to upgrade mathematics and reading skills.

IDS 0012 Basic Skills III

Prerequisite: IDS 0011 or consent of the instructor. Corequisite: enrollment in a non-college entry-level job training course offered at the Downtown Campus or consent of the instructor. This course is designed to provide the basic academic skills necessary for completion of the third course in the occupational programs offered at Downtown Campus. Following pretesting and assessment, students will be provided with individualized instructional plans to upgrade mathematics and reading skills.

MEA 0005 Medical Assisting I

Prerequisite: TABE, high school diploma or GED. The first of two sequential courses, this course is designed specifically for entry-level job training and will orient individuals to a multitude of basic skills for employment in a physician's office, ambulatory care centers, clinics or hospitals. Examples of skills needed are secretarial practices and procedures, introduction to computers, medical transcription, examining room technique, X-ray safety and laboratory procedures. Applicants are encouraged to type 25 words per minute or be familiar with a computer keyboard.

MEA 0006 Medical Assisting II

Prerequisite: MEA 0005. This course is an intensive course and a continuation of some of the skills presented in Medical Assisting I. It is designed specifically for entry-level job training and will orient students to a multitude of basic skills for employment in a physician's office, ambulatory care centers, clinics or hospitals. Examples of these skills are secretarial practices and procedures, introduction to computers, medical transcription, examining room technique, X-ray safety and laboratory procedures. Applicants are encouraged to type 25 words per minute or be familiar with a computer keyboard.

MRE 0030 Medical Transcription I

Prerequisite: must keyboard at rate of 45 wpm and satisfactory score on placement test. This course is designed to introduce students to transcription of medical documents, healthcare records, and other types of medical dictation. Students will transcribe basic medical dictation, incorporating English usage and machine transcription skills, medical knowledge and terminology, keyboarding skills, and proofreading and editing skills, and will meet progressively demanding accuracy and productivity standards. Students will transcribe "real" dictation from a variety of medical specialties on computers using Wordperfect.

MRE 0031 Medical Transcription II

Prerequisite: MRE 0030. This course is designed to expand students' transcribing abilities. Students transcribe more difficult actual medical dictation, requiring greater knowledge of fundamentals taught in Medical Transcription I, continuing to advance skills in all areas of competency, while meeting progressively demanding accuracy and productivity standards. Students are expected to utilize all available reference materials.

MTE 0054 Four-Stroke Marine Engines

This course is designed to teach entry-level job skills and to familiarize students with construction, operation and maintenance of the four-stroke marine engine. Topics include use of test equipment, electrical systems, and maintenance, repair and testing of the engines.

MTE 0131 Marine Ignition Systems

This course is designed to teach entry-level job skills in the various types of ignition and charging systems used in the marine engines. Topics include testing and repair of magneto, battery and C/D ignition systems, as well as the battery charging system.

MTE 0132 Two-Stroke Marine Engines

This course is designed to teach entry-level job skills and to familiarize students with the construction, operation and maintenance of the two-stroke marine engine. Topics include use of test equipment, electrical systems and maintenance, inspection and testing of engines.

MTE 0165 Maintaining and Repairing Fuel Systems in Diesel Engines

Prerequisite: DIM 0001 or consent of instructor. This course is designed to teach entry-level job skills on the performance of maintaining and repairing fuel systems in diesel engines. Emphasis will be placed on Caterpillar, Detroit and Cummins fuel systems with special emphasis placed on safety and manufacturer's specifications during repair and maintenance procedures.

MTE 0181 Marine Fuel and Cooling Systems

This course is designed to teach entry-level job skills in maintenance and repair techniques for the fuel and cooling systems on marine engines. Topics include maintenance and repair of carbureted systems, fuel injection systems and cooling systems for both inboard and outboard systems.

MTE 0221 Marine Engine Gearing

This course is designed to teach entry-level job skills in the maintenance, repair and testing of upper and lower gearing on marine engines. Topics include how to repair and adjust power tilt and trim units, and how to prop and rig small boats.

MTE 0223 Intermediate and Stern Drive Units

This course is designed to teach entry-level job skills in lubrication and gearing systems. Topics include various lubrication systems for both inboard and outboard drive units, along with maintenance and repair of intermediate housings and stern drive upper gear cases.

MTE 0501 Welding and Trailer Repair

This course is designed to teach entry-level job skills. Topics include basic arc welding, oxy-acetylene cutting, use of tools and shop equipment necessary to facilitate actual trailer repair and safety.

OFT 0021 Office Support/Receptionist

This course prepares students for employment as receptionists, appointment clerks, information assistants, customer service, and will provide training for persons previously or currently employed in these occupational areas.

OFT 0612 Introduction to Office Systems**Computer Support**

This course is designed to familiarize students with the microcomputer, its terminology and the technology used in business environments.

OFT 0613 Office Systems Software Installation and Troubleshooting

Prerequisite: OFT 0612. This course is designed to familiarize students with software applications used in the business environment. The course includes applications installation, maintenance, and troubleshooting common problems.

OFT 0614 Office Systems Hardware Installation and Troubleshooting

Prerequisites: OFT 0612 and OFT 0613. This course is designed to familiarize students with the processes and procedures involved in installing and troubleshooting microcomputer hardware components.

OFT 0615 Office Systems Microcomputer Support Practicum

Prerequisites: OFT 0612, OFT 0613 and OFT 0614. This course is designed to give students hands-on experience in a business simulation environment. Students will perform the functions of an office systems microcomputer support person.

OFT 0642 Data Entry Operations

This course is to prepare students for employment as terminal operators, data entry operators, data typists, clerk typists or clerks. This course teaches keyboarding, data entry touch using 10-key, batch entry, word processing, electronic spreadsheets and databases.

ORH 0041 Basic Floral Design

The purpose of this course is to develop the fundamental competencies necessary for employment in the floral design and marketing industry. Topics include basic design construction in round, horizontal, symmetrical and asymmetrical designs; proper care and handling procedures for cut flowers and foliage; flower and foliage identification; and basic principles of design. Students will be issued a tool kit at the first class meeting (covered by the supply fee) and will be expected to bring this kit to each class. All flowers and basic supplies (foam, wire, tape, etc.) will be furnished. Students need a current tetanus shot.

ORH 0043 Intermediate Floral Design

Prerequisite: ORH 0041. The purpose of this course is to further develop basic skills learned in Basic Floral Design. The course emphasizes funeral designs, and students learn how to conduct funeral consultations and construction of funeral baskets, wreaths, standing sprays, hearts, crosses, casket covers and other specialty funeral designs. Hospital

arrangements, seasonal arrangements, baby novelties, fruit baskets, gourmet and gift baskets are also covered, and the laboratory provides hands-on experience to students. Wholesale and retail pricing policies are introduced in this class, and students will have ample opportunity to learn the art of profitable pricing for the floral industry.

ORH 0045 Wedding Floral Designs

Prerequisites: ORH 0041 and ORH 0610. In this course students will learn how to conduct a wedding consultation and the proper techniques of coordinating a complete wedding. Students will design a "mock wedding" and do all the planning including pricing, developing wholesale shopping lists of materials needed and time estimated as to how long it will take to complete this wedding. They will present their wedding plan orally in class. Hands-on skills include construction of bouquets, corsages, church and reception flowers, wedding set up and pricing policies.

ORH 0046 Floral Design and Marketing Skills I

Corequisites: ORH 0041 and ORH 0610. This course provides students the opportunity to gain floral design and marketing skills and employability skills in a carefully supervised setting. Additional lab time may be required to complete assignments.

ORH 0047 Floral Design and Marketing Skills II

Prerequisites: ORH 0046 and ORH 0043. A continuation of Floral Design and Marketing Skills I, this course continues to provide opportunities for students to gain floral design and marketing skills in a carefully supervised setting.

ORH 0048 Floral Design and Marketing Skills III

Prerequisites: ORH 0046 and ORH 0047. Corequisite: ORH 0045 and ORH 0614. An extension of Floral Design and Marketing Skills II, this course provides the opportunity to gain advanced floral design and marketing skills and prepares students for entering the labor force.

ORH 0061 Silk, Dried and Holiday Designs

This course is designed to teach students how to prepare a variety of silk, dried and fresh arrangements for the holiday season. Students will learn how to purchase, sell and market silk and dried designs to both retail and commercial customers. Additional lab time is required to complete all assignments. Planned and supervised educational activities include the following: directed laboratory experience, student projects and field trips.

ORH 0062 European and Advanced Design Techniques

Prerequisite: ORH 0041. This course will expose floral design students to advanced design techniques such as basing, terracing, grouping, pillowing, banding, framing and parallelism. Students will study European, oriental and vegetative design styles. In addition students will learn display techniques, commercial design work and design show competitions. Several field trips are part of the class learning environment.

ORH 0520 Plant Identification

This entry-level course is designed to introduce students to the most common commercially produced flowering and foliage plants. Students will study basic plant morphology and physiology, plant identification and the care of foliage and flowering plants in shops and homes. Instruction and learning activities are provided through field trips and in a laboratory setting using hands-on experiences with the tools and materials appropriate to course content and in accordance with practices in the field.

ORH 0610 Flower Shop Operations I

This entry-level course is designed to teach students everyday skills in flower shop operations including window display buying, delivery, operation of a cash register, customer relations, planning for the holidays, advertising and use of a wire service. Actual hands-on experience will be provided in the operation of a small floral retail operation on campus. Students will demonstrate oral communication skills by completing customers' sales transactions.

ORH 0612 Retail Management Operations

This course provides the opportunity to analyze and use data for assortment planning, evaluation and sales management. The course includes assortment, personnel scheduling and evaluation of past performance. Students will also acquire knowledge and develop skills in the performance of basic spread sheet application as related to retail management operation. No prior computer experience is required.

ORH 0614 Flower Shop Operations II

Prerequisite: ORH 0610. This course provides students the opportunity to acquire the knowledge and skills necessary to manage a retail flower shop. Students will learn how to lay out the workroom, cooler, sales and display areas. Students will acquire skills in selection of merchandise and products, shop management, inventory control and sales analysis. Students will also learn credit and billing procedures, personnel administration and controlling payroll and other expenses. Actual hands-on experience will be provided as students work in a small retail operation on campus. A calculator is required.

ORH 0615 Floral Purchasing

Prerequisite: ORH 0610, ORH 0614 or permission of the instructor. This course provides students the fundamentals in purchasing perishable and non-perishable floral merchandise. Emphasis will be placed on determining consumer demand as well as planning, selecting, controlling and evaluating purchases. This course will tour firms representing various aspects of the floral industry including visits to wholesalers, manufacturers, gift markets and trade shows. Costs for travel, lodging, food and admission will be an additional charge.

ORH 0941 Floral Design Internship

Prerequisites: ORH 0041, ORH 0610, ORH 0520, HEV 0239 and ORH 0046. Corequisite: ORH 0043. Students will work in a retail florist shop 19 hours per week. The instructor will work with the shop manager or owner to monitor students' progress toward predetermined goals. Students will attend a two-hour seminar on campus every

other week. Each internship will last a minimum of 15 weeks and require student interns to work for a total of 300 hours during this training. Students will not be compensated during this training.

OTA 0005 Office Occupations I

Corequisite: IDS 0010. This course is the first of three sequential courses designed for entry-level job training in the field of office occupations and includes typewriting, business English, filing and office machines.

OTA 0006 Office Occupations II

Prerequisite: OTA 0005 or consent of instructor. Corequisite: IDS 0011. This course is the second in a training series of three courses designed for entry-level job in the area of office occupations and includes typewriting, business English, record keeping and shorthand.

OTA 0007 Office Occupations III

Prerequisite: OTA 0006 or consent of instructor. Corequisite: IDS 0012. This is the last course in a series of three designed for entry-level job training in office occupations and includes typewriting, business English, record keeping, machine transcription and business mathematics.

OTA 0008 Office Assistant I

This course will cover telecommunications, mathematical applications and keyboarding. Additionally, records management, mail handling/processing, human relations and information/word processing will be taught.

OTA 0009 Office Assistant II

Prerequisite: OTA 0008. This course will cover telecommunications, mathematical applications and keyboarding. Additionally, records management, mail handling/processing, human relations and information/word processing will be taught.

OTA 0630 Medical Office Applications I

This course is the first of two sequential courses designed for entry-level job training in a medical office. The course focuses on medical office applications, and includes medical terminology, keyboarding and data entry, medical transcription, and telecommunications skills. Reinforcement of basic skills in English, mathematics and job preparation is included.

OTA 0645 Medical Office Applications II

This course is the second of two sequential courses designed for entry-level job training in a medical office. The course focuses on medical office applications, and includes patient information management, law and ethics for allied healthcare workers, customer service, medical filing, and mail handling. Reinforcement of basic skills in English, mathematics and job preparation is included.

PMT 0106 Welding Basic

This course is designed to teach entry-level job skills in fusing metal parts by means of welding rods and electrical welding apparatus to fabricate metal articles or to repair damaged metal objects. It also includes instruction and training in manual and machine oxy-acetylene flame cutting.

PMT 0112 Oxygen-Acetylene Welding and Brazing

Prerequisite: PMT 0106. This course provides entry-level job training in the welding field and presents technical information about oxygen-acetylene welding, brazing and braze welding using 16 gage through three-sixteenths inch mild steel, 16 gage stainless steel, and copper piping and fittings. Related information includes equipment operation and weld quality.

PMT 0124 Welding Advanced

Prerequisite: PMT 0106. This course is designed to teach entry-level job skills in shielded metal arc welding and welding safety. It provides training to develop the manual skills necessary to make high quality shielded metal arc welds in all positions on mild steel three-eighths inch plate, multiple pass butt joints and one inch plate lap joint and air arc gouging.

PMT 0134 Gas Metal Arc Welding

Prerequisite: PMT 0124 or consent of instructor. This course is designed to provide entry-level job skills necessary to make high quality gas metal arc welds in all positions on mild steel from one-sixteenth inch sheet to three-eighths inch plate single pass and multiple pass, using short circuit transfer and to make high quality welds on aluminum using spray transfer.

PMT 0141 Flux Cored Arc Welding Gas Tungsten Arc Welding (Basic)

Prerequisite: PMT 0134. This course is designed to teach entry-level job skills in the welding field. Topics include flux cored arc welding and arc welding safety. Related topics include equipment operation and weld quality. It also provides training to develop the manual skills necessary to make high quality gas tungsten arc welds in all positions on 16 and 11 gage mild steel, 16 gage stainless steel and 11 gage aluminum, using both direct and alternating currents.

PMT 0166 Shielded Metal Arc Welding Pipe (Uphill)

Prerequisite: PMT 0171. This course is designed to teach entry-level job skills in pipe welding nomenclature, weld quality, uphill pipe procedures and preheating and inter-pass heat elements. Topics include welding skills necessary to make high quality welds on open root mild steel pipe in the 2G, 5G and 6G positions and mild steel pipe with backing rings in the 6G position.

PMT 0171 Gas Tungsten Arc Welding (TIG) Pipe and Tubing

Prerequisite: PMT 0141. This course is designed to teach entry-level job skills in the welding field. Topics include gas tungsten arc welding fundamentals, preparation for welding pipe and pipe welding defects.

PMT 0173 Gas Metal Arc Welding Pipe

Prerequisite: PMT 0166. This course is designed to teach entry-level job skills in the welding field. Topics include gas metal arc welding fundamentals, preparation for welding pipe and pipe defects. The course develops the manual skills necessary to produce high quality groove welds on six inch diameter steel pipe in the 2G, 5G and 6G positions.

PMT 0201 Industrial Blueprint Reading

This course is designed to teach entry-level job skills. Topics include how to interpret blueprints, visualization, understanding various views, alphabet of lines and symbols, and understanding supplementary information contained on prints.

PMT 0205 Measuring Tools

This course is designed to teach entry-level job skills. Topics include machine measurement in theory and manipulation training in safety, the use of scales, inside and outside micrometers (English and metric), inside and outside calipers, telescope gages, combination set and thread micrometers. Mastering bench and portable tools for benchwork on the job is also included.

PMT 0213 Lathe Series

This course is designed to teach entry-level job skills. Topics include safety, machine set-up, center drilling, alignment of centers, facing, filing, polishing, burring, taper turning, thread cutting, (internal and external) drilling, reaming, grooving and grinding.

PMT 0214 Vertical Milling

This course is designed to teach entry-level job skills. Topics include the proper methods and procedures of machining in a vertical milling machine. Special emphasis is given to shop safety methods and procedures of cutters and end mills that can be used in a vertical milling machine for performing various operations. Topics include the mounting of various cutters, alignment of head and vise in order to mill a flat surface, square and parallel surface, and machine an angular surface.

PMT 0217 Shaper Series

This course is designed to teach entry-level job skills. Topics include the theory of machining concepts and calculating setups and operational processing in the shaper trade (English-metric). The shaper concepts cover safety, setting work in the vise, setting of the length and position of the shaper stroke, machining of a flat surface, machining work square and parallel, the alignment of work in a vise, the alignment of the toolhead, shaping a vertical surface and machining an angular surface. Special emphasis is given to shop safety precautions.

PMT 0218 Drill Press

This course is designed to teach entry-level job skills. Topics include sensitive drill presses, common drill presses and the operation and function of all accessories. Students will also receive instructions in safety, calculations, and set-ups for various materials.

PMT 0226 Surface Grinders

This course is designed to teach entry-level job skills. Topics include procedures for mounting and removing wheels, truing and dressing a grinding wheel, grinding of a flat surface, grinding the edges of a work piece square and parallel, and grinding an angular surface.

PMT 0250 Basic Numerical Control

This course is designed for entry-level job skills. Topics include definition of numerical control terms, description of machine movements, programming of feed rate, drilling, tape, milling and miscellaneous functions.

PMT 0401 Basic Engine Parts/Engine Disassembly/Principles of Power

This course is designed to teach entry-level job skills. Topics include engine parts identification, principles of power and engine disassembly.

PMT 0402 Precision and Non-Precision Tools for the Automotive Trade

This course is designed to teach entry-level job skills in instrumentation used in the remanufacturing of automotive engines.

PMT 0405 Cleaning Engine Parts

This course is designed to teach entry-level job skills. Topics include training in cleaning machines, cleaning products and methods of cleaning engine parts with special emphasis put on safety in the use of the machines and chemicals.

PMT 0411 Identifying and Repairing Cracks

This course is designed to teach entry-level job skills in the identification and repair of cracks in automotive parts.

PMT 0415 Automotive Reconditioning Machines I

This course is designed to teach entry-level job skills related to the operation of four machines commonly used in the automotive machine shop: wet head grinder, valve grinder, valve seat grinder and the piston pin machine.

PMT 0421 Automotive Reconditioning Machines II

Prerequisite: PMT 0415 or consent of instructor. This course is designed to teach entry-level job skills and is a continuation of Automotive Reconditioning Machines I. Topics include the operation of the following four machines commonly used in the automotive machine shop: rod and cap grinder, precision honing, horizontal honing and cylinder boring.

PMT 0431 Automotive Reconditioning Machines III

Prerequisite: PMT 0421 or consent of instructor. This course is designed to teach entry-level job skills and is a continuation of Automotive Reconditioning Machines II. Topics include the operation of the following four major machines commonly used in the automotive machine shop: head machining center, flywheel grinder, milling and brake service center.

PMT 0435 Automotive Reconditioning Machines IV

Prerequisite: PMT 0431 or consent of instructor. This course is designed to teach entry-level job skills and is a continuation of Automotive Reconditioning Machines III. Topics include the operation of the following four major machines commonly used in the automotive machine shop: crankshaft straightener, crankshaft grinder, drill press and engine lathe.

PRN 0930 Practical Nursing I

Prerequisites: High school diploma or GED, TABE, cardiopulmonary resuscitation (CPR) certification. The practical nursing program is designed as entry-level job training to prepare beginning practitioners of practical nursing. This first course consists of activities designed to familiarize students with basic needs of the well individual. The units progress from a study of the normal structure and function of the body, growth and development, health concepts and nutrition, to the common problems encountered during illness. Interpersonal relationships, principles and skills are included to assist students in providing care for clients and families. Demonstrations and supervised practice are planned in a nursing laboratory for students to acquire basic skills prior to assignment in local hospitals for clinical experience.

PRN 0931 Practical Nursing II

Prerequisite: PRN 0930. This course is a continuation of Practical Nursing I and includes basic concepts and principles needed to care for the medically and/or surgically ill client. Nutritional, psychosociological, pharmacological, rehabilitative and preventive aspects of care for all age groups are integrated throughout the program. Students are assigned clinical experiences in selected areas of appropriate community agencies, planned to be concurrent with the theory presented in the classroom and based upon their level of learning.

PRN 0932 Practical Nursing III

Prerequisites: PRN 0930 and PRN 0931. This course is a continuation of Practical Nursing II and includes basic concepts and principles needed to care for the medically and/or surgically ill client. Nutritional, psychosociological, pharmacological, rehabilitative and preventive aspects of care for all age groups are integrated throughout the program. Instruction is also provided in the specialty areas of maternal and newborn nursing, pediatric nursing and geriatric nursing. Students are assigned clinical experiences in selected areas of appropriate community agencies, planned to be concurrent with the theory presented in the classroom and based upon their level of learning.

REE 0040 Real Estate Principles and Practices I

This course provides students with the fundamentals of real estate and license law under the Florida statutes. It includes a study of the business and legal aspects of real estate ownership, contracts, deeds, titles, mortgage instruments, property law and Florida Real Estate Commission governing policies and regulations relative to salespeople. Successful completion of this course and the end of course examination meets the Florida Real Estate Commission requirements.

REE 0041 Real Estate Principles and Practices II

Prerequisite: REE 0040 or Florida real estate sales license. This course is designed to prepare students for the Florida Real Estate Broker's Examination. These students must be licensed Florida real estate salespeople who have been properly qualified by the Florida Real Estate Commission before being permitted to register for the course.

RMI 0641 Insurance Marketing

This course is designed to help prepare life, health and variable annuities agents for state license exams and initial training. The course shall consist of 40 hours of classroom instruction in life insurance, health insurance and annuities. A final examination covering life, health and variable annuities will be given at the end of each course.

SER 0001 Familiarization With Small Engines

This course is designed to teach entry-level job skills. Topics include familiarization with the small engine field, employer relations, special tool applications, precision measuring and practical applications of some electrical test/measuring equipment.

SER 0101 Construction of Small Engines

Prerequisite: SER 0001 or consent of instructor. This course is designed to teach entry-level job skills. Topics include necessary familiarization with the working parts of a small gasoline engine and, at the same time, provides technical information on the operation of these small engines.

SER 0105 Fuel Systems — Small Engines

Prerequisite: SER 0001. This course is designed to teach entry-level job skills. Topics include an in-depth study of various small engines fuel system including tanks, lines, filters, pumps, carburetors, governors, classroom lectures and shop experience.

SER 0151 Product Familiarization

Prerequisite: SER 0001 or consent of instructor. This course is designed to teach entry-level job skills. Topics include product identification using manufacturer's model numbering system, and locating and removing various components on both self-propelled lawnmowers and riding mowers. This course includes lecture and classroom experience.

SER 0211 Drive Systems

Prerequisites: SER 0001 and SER 0151 or consent of instructor. This course is designed to teach entry-level job skills. Topics include instruction on the drive system of riding lawnmowers, garden tillers, compliance lawnmowers and mower battery maintenance. Instruction includes lecture and classroom experiences.

SER 0551 Troubleshooting Lawn and Garden Equipment

This course is designed to teach entry-level job skills. Topics in this advanced course include instruction on ignition and electrical systems for lawn and garden gasoline engine powered equipment, and the diagnostic and performance testing procedures available. Instruction includes both lecture and shop experiences.

SLS 0313 Vocational-Technical Career Explorations

This course introduces students to various vocational skills areas. It allows students the opportunities to explore three areas while gaining information on various aspects of the trade, such as what jobs are included, where the skills would be utilized and approximate pay scales. Course

topics are reinforced by laboratory experiences designed to stimulate interest while providing the opportunity to gain some insight in the actual job environment.

SLS 0341 Employability Skills

This course is designed to assist students with an understanding of the world of work and to provide them with the skills necessary to conduct a job search and obtain employment. The course covers such topics as sources for the job applications, resume writing, interviewing skills and interpersonal relations for keeping the job.

STS 0810 Surgical Technology I

Prerequisite: TABE, high school diploma or GED. This course is the first of two sequential courses designed specifically for entry-level job training. It is a combination of classroom studies and clinical experiences in the operating room, recovery room and delivery room which prepares students to assist surgeons, anesthesiologists and nurses with client care and related services. Particular emphasis is placed upon the skills involved in scrubbing and circulating during surgical procedures and in the preparation and maintenance of sterilized and unsterilized supplies.

STS 0820 Surgical Technology II

Prerequisite: STS 0810. This course is a continuation of some of the skills presented in Surgical Technology I. It is a combination of classroom studies and clinical experiences in the operating room, recovery room and delivery room which prepares students to assist surgeons, anesthesiologists and nurses with client care and related services. Particular emphasis is placed upon the skills involved in scrubbing and circulating during surgical procedures, and in the preparation and maintenance of sterilized and unsterilized supplies. Upon successful completion of the program, graduates are qualified to take a national certifying examination to become a certified surgical technologist (CST).

VPI 0100 Basic Reading Skills

This course is designed to provide vocational preparatory instruction. Students will be provided with an individualized program to upgrade their reading skills. The amount of hours spent by students in a particular area will depend on the scores achieved on the Test of Adult Basic Education (TABE).

VPI 0200 Basic Mathematical Skills

This course is designed to provide vocational preparatory instruction. Students will be provided with an individualized program to upgrade mathematical skills in arithmetic reasoning and fundamentals. The amount of hours spent by students in a particular area will depend on the scores achieved on the Test of Adult Basic Education (TABE).

VPI 0300 Basic Language Skills

This course is designed to provide vocational preparatory instruction. Students will be provided with an individualized program to upgrade their language skills. The amount of hours spent by students in a particular area will depend on the scores achieved on the Test of Adult Basic Education (TABE).

Special Series Courses

— 0920-0921 Seminars

This course offers seminars in each vocational area of interest as supplementary instruction.

— 0930 Postsecondary Internship

This course provides work experience in a technical or industrial setting. Students will receive supervision from a technical and industrial manager and support from College instructors.

— 0948 Apprenticeship Cooperative Education

This course will provide on-the-job training that parallels and reinforces training received in the related or classroom portion of the apprenticeship program.

— 0949 Vocational Cooperative Education

Course options A-D provide entry-level job training that corresponds with the second through the fifth level of training in a vocational program. Students will receive a combination of classroom and on-the-job instruction in their chosen occupational area.

Adult Studies Preparation, Adult Studies Review, High School Diploma and English as a Second Language

Adult Studies Course Descriptions

AHS 0101 English I High School Cr. 1

This course provides instruction in English language skills including reading, writing, speaking and listening in the content areas of literature.

AHS 0102 English II High School Cr. 1

This course provides instruction in English language skills and world literature. The content includes but is not limited to instruction in reading and vocabulary necessary for comprehension of printed materials. Literature study emphasizes analysis of selections found in world literature. The study of language includes grammar, mechanics, usage and other conventions of standard written English. The study of mass media includes an analysis of propaganda and persuasion techniques. Speech instruction includes analysis of effective techniques in oral presentations. The course includes composition instruction.

AHS 0103 English III High School Cr. 1

This course provides instruction in American literature and in English language skills. It provides a programmed approach to mid-level high school grammar and usage, effective sentence structure, capitalization and punctuation. It is designed to give practice in writing multi-paragraph papers of various types, including documented papers. Reference and summarizing skills are also covered. Listening, speaking and writing assignments will be related, when appropriate, to the study of American literature. Literature study includes the analysis of various examples of American literacy works in various genres. Vocabulary study focuses upon verbal analogies and other patterns commonly found in standardized tests.

AHS 0104 English IV High School Cr. 1

This course provides high-level instruction in English language skills. The content includes instruction in vocabulary and reading necessary for students' comprehension of printed materials. Literature study includes representative examples from British literature. Writing experiences are structured to provide practice in real life writing situations likely to be encountered beyond secondary school. Opportunities are given to students for extending their speaking and listening skills.

AHS 0105 Business English I High School Cr. 1

This course provides instruction in English language arts, with emphasis upon specific language skills as they relate to various occupations. The content includes instruction in personal and business communications, both oral and written, language study with emphasis upon practical applications of standard English mechanics and usage, vocabulary study with emphasis upon specialized vocational terminology and interpersonal relationships in business environments through the study of literature.

AHS 0121 World Literature High School Cr. 1

This course studies selected works of western and eastern literature from ancient times to the present. The content includes literature selections which are representative of particular cultures as well as indicative of world literary movements. Selections include fiction, nonfiction and poetry. The course provides opportunities for writing both formal and informal papers based upon the literature.

AHS 0122 American Literature High School Cr. 1

The purpose of this course is to study selected American literary works of various genres in relationship to the development of the distinctive qualities of the national literature. The content includes instruction aimed at understanding the political, cultural, social and historical forces and movements in America as reflected in its literature. This course also includes the tenets and characteristics of puritan, transcendental, romantic, realistic, naturalistic, modern and contemporary movements. In addition, this course contains writing assignments based upon literature, emphasizing the development of insight, taste and critical judgement.

AHS 0123 British Literature High School Cr. 1

The purpose of this course is to study British literary works of various genres in relationship to the historical and cultural forces which influenced them and to develop understanding of the various literary movements in British literature. The content includes representative works of poetry, drama, fiction, nonfiction, novels, biographies and literary criticism. Selections are from the following literary periods: Anglo-Saxon, medieval, Elizabethan, reformation, neo-classical, romantic, victorian, modern and contemporary. The course provides students with opportunities for interpreting the literature through oral and written analysis.

AHS 0150 Functional Basic Skills In Communications High School Cr. 1

This course provides instruction for students to develop competencies in the practical communications skills of reading and writing, as measured by the High School Competency Test (HSCT). Students will learn how to fill out applications, prepare resumes, write business and social letters, prepare bibliographies, write and comprehend ads in newspapers, and other important types of writing needed for success in school, on the job and in social life.

AHS 0151 Writing I High School Cr. 1/2

Prerequisite: AHS 0102 or its equivalent. This course provides an organized study of both sentence and paragraph structure. These are shaped into larger patterns via written assignments which are based upon personal experiences, observations and literature. Emphasis is placed on form and content as well as manuscript preparation. Other areas of concentration are diction, coherence and transition, mechanics of grammar and punctuation, and spelling. Also included are the skills needed for selecting and limiting a topic, arranging support, outlining, drafting and revision.

AHS 0152 Writing II High School Cr. 1/2

Prerequisite: AHS 0151. This course extends the development of skills introduced in Writing I. It focuses on refining exposition and introduces analysis and persuasion. In addition, tone, syntax and figurative language are taught. A major emphasis is placed on the skills needed for revision. Personal writing techniques continue to be improved through practice of rewriting, drafting and improved editing.

AHS 0190 Remedial/Compensatory Writing Skills High School Cr. 1/2

This course will provide preparatory and remedial writing skills assistance to students who have not passed the High School Competency Test (HSCT). This course will be counted as an elective.

AHS 0191 Remedial/Compensatory Communications Skills III High School Cr. 1

This course provides remedial/compensatory instruction to students who are preparing to retake the High School Competency Test (HSCT) Communications: Reading and Writing Test. This course will be counted as an elective credit.

AHS 0193 English Honors III High School Cr. 1

Prerequisite: satisfactory score on placement test. This course is a dual-enrollment course which also earns 3 college credit hours in English Composition I. It embodies the fundamentals of effective expression with emphasis on the various forms of expository writing, logical and imaginative thinking, and reading for understanding. The course provides instruction in sentence structure, diction, organization of short essays and correct usage of standard American English.

AHS 0194 English Honors IV High School Cr. 1

Prerequisite: ENC 1101 with a grade of "C" or better. This course is a dual enrollment course which also earns 3 college credit hours in English Composition II. As a continuation of AHS English Honors III and English Composition I, this course includes the study and practice in research writing and writing competencies.

AHS 0201 General Science High School Cr. 1

This course provides students with experiences and activities to acquaint them with the concepts of physical, life and earth/space sciences.

AHS 0202 Earth/Space Science High School Cr. 1

This course provides opportunities for students to develop concepts basic to the earth, its materials, processes, history and environment in space.

AHS 0203 Environmental Science High School Cr. 1

This course provides students with the study of man's interaction with the environment. The content includes forms of pollution, conservation, environmental planning and policy, public land usages, population dynamics and major forms of energy.

AHS 0250 Anatomy and Physiology (With Lab) High School Cr. 1

This course provides students with exploratory activities in the structures and functions of the components of the human body.

AHS 0251 Botany (With Lab) High School Cr. 1

This course provides students with an in-depth study of the plant kingdom. The content includes but is not limited to plant cell anatomy and physiology, plant genetics, plant classification and use of taxonomic key, comparative plant anatomy and physiology, plant responses, plant life cycles, ecology and importance of plants to man.

AHS 0252 Chemistry I High School Cr. 1

This course covers the areas of elements and compounds, oxygen and hydrogen, water and solutions, carbon and its oxides, and acids, bases and salts.

AHS 0253 Physical Science (With Lab) High School Cr. 1

This course is designed to acquaint individuals with various aspects of the physical sciences. It includes elements of physics, chemistry, geology, astrology, meteorology and other selected physical science topics. A laboratory experience is included.

AHS 0254 General Science (With Lab) High School Cr. 1

This course provides students with experience and activities to acquaint them with the concepts of physical, life and earth/space sciences.

AHS 0255 Biology I High School Cr. 1

This course is designed to give students an introduction to the origin, development, structure, function and distribution of living things. An integral and required part of this course will be the laboratory section. This course will provide hands-on experience as well as activities that will acquaint students with scientific procedures and equipment.

AHS 0256 Earth/Space Science (With Lab) High School Cr. 1

This course provides opportunities for students to develop concepts basic to the earth, its materials, processes, history and environment in space. A laboratory experience is included.

AHS 0257 Environmental Science (With Lab) High School Cr. 1

This course provides students with the study of man's interaction with the environment. The content includes forms of pollution, conservation, environmental planning and policy, public land usages, population dynamics and major forms of energy.

AHS 0258 Marine Biology (With Lab) High School Cr. 1

This course introduces students to the geological, chemical and biological aspects of the marine environment, with an emphasis on the biological. Content includes origin of the oceans, marine communities, classification, taxonomy

and man's interrelationship with the oceans. A required lab component is included to provide students with hands-on experience in marine concepts.

AHS 0290 Anatomy/Physiology Honors
(With Lab) High School Cr. 1

Prerequisite: satisfactory score on placement test. This course is a dual-enrollment course which also earns 3 college credit hours in Human Anatomy and Physiology I. This course, a study of the gross morphology and physiology of the human, includes sections concerned with cells, tissues, the musculo-skeletal system, circulation, the lymphatic system, the digestive system, and the integument system. The course includes a laboratory component.

AHS 0292 Chemistry I Honors
(With Lab) High School Cr. 1

Prerequisite: satisfactory score on placement test. This course is a dual-enrollment course which also earns four college credit hours in Introduction to General Chemistry. The course is an introduction to the concepts of inorganic chemistry including structure of matter, atomic theory, nomenclature, bonding, gases, solutions, equilibrium, and acids and bases. The course includes a laboratory component.

AHS 0293 Physical Science Honors
(With Lab) High School Cr. 1

Prerequisite: satisfactory score on placement test. This course is a dual-enrollment course which also earns three college credit hours in Physical Science. Students will benefit by taking high school algebra prior to enrolling in this course. The course acquaints students with the development of the physical sciences, with the integrating principles and theories in the physical sciences, with the practice of the scientific method, and with a useful knowledge of selected areas in mechanics, electricity and magnetism, periodicity and atomic structure and nuclear phenomena. Presentation involves lectures, demonstrations, and films.

AHS 0295 Biology I Honors
(With Lab) High School Cr. 1

Prerequisite: satisfactory score on placement test. This course is a dual-enrollment course which also earns four college credit hours in the Principles of Biology I. The course, an introduction to the principles of biology, includes studies of cellular organization, genetics, and evolution. It includes a laboratory component.

AHS 0296 Earth/Space Science Honors
(With Lab) High School Cr. 1

Prerequisite: satisfactory score on placement test. This course is a dual-enrollment course which also earns four college credit hours in Earth and Space Science. The course acquaints students with the development of science, the integrating principles and theories in the earth sciences, the practice of the scientific method and with a useful knowledge of selected areas of geology, astronomy and meteorology. Presentation involves lectures, demonstrations and films.

AHS 0303 Consumer Mathematics High School Cr. 1

This course is designed to cover the wide range of consumer problems such as banking, insurance, bonds,

stocks, home ownership and installment buying. This course also incorporates problems involving proprietorship, payrolls, sales, discounts, simple interest, compound interest and financial statements in its content.

AHS 0305 Explorations in Mathematics I High School Cr. 1

This course is designed to ensure competency in computation with integers, fractions, decimals, percents, measurement and geometric concepts.

AHS 0306 Explorations in Mathematics II High School Cr. 1

Prerequisite: AHS 0305 with a "C" or better or an equivalent course. This course is designed to teach students to apply computational skills to real-world problems.

AHS 0307 Mathematics Competency Skills High School Cr. 1

This course provides students the opportunity to develop skills necessary for success on the Florida High School Competency Skills Test. The content includes estimation, mental mathematics, algebraic and geometric relationships, measurements, consumer applications, statistics and probability, patterns and functions, ratio and proportions, number and operation sense, and problem solving strategies.

AHS 0320 Prealgebra High School Cr. 1

Prerequisite: AHS 0305 with a "C" or better or any equivalent, or higher level course. This course is an orientation to the understanding of the basic concepts and terminology of the new mathematics program being taught in the elementary and junior high schools in Florida.

AHS 0321 Algebra I High School Cr. 1

Prerequisite: AHS 0320 with a grade of "C" or better or consent of professor. This course is designed as an introduction to algebra with emphasis on fundamentals, the solution of equations and the application of equations to everyday problems.

AHS 0322 Geometry High School Cr. 1

Prerequisite: AHS 0321 with a grade of "C" or better or consent of professor. This course is designed to deal with geometric figures in a plane surface in which construction and deductive reasoning with triangles, perpendicular and parallel lines, polygons and the circles are emphasized. Additionally, special emphasis is placed on congruent triangles.

AHS 0323 Algebra II High School Cr. 1

Prerequisite: AHS 0321 with a grade of "C" or better or consent of professor. This course is designed as a continuation of Algebra I with emphasis on fractions, fractional equations, quadratic equations, elementary trigonometry, ratio and proportion, and radicals.

AHS 0324 Mathematical Analysis High School Cr. 1

Prerequisite: Algebra II or higher with a grade of "C" or better or consent of professor, and satisfactory score on placement test. This course is a dual-enrollment course which also earns four college credit hours in Precalculus Algebra. The purpose of the course is to emphasize the

skills necessary for the study of calculus. A review of algebraic techniques and operations, exponents, radicals, complex numbers, and absolute value is also included. Major course topics are: linear equations and inequalities; quadratic equations and inequalities; relations, functions, and graphs; exponential and logarithmic functions; systems of equations and inequalities; higher degree polynomial equations; matrices and determinants; applications; sequences, series, and the binomial theorem; and mathematical proof.

AHS 0325 Trigonometry High School Cr. 1/2

Prerequisite: Algebra II or higher with a grade of "C" or better or consent of professor, and a satisfactory score on the placement test. This course is a dual-enrollment course which also earns three college credit hours in College Trigonometry. The major topics in the course are circular functions, solving triangles, trigonometric identities and functions, inverse relations and trigonometric equations, complex numbers and polar coordinates.

AHS 0390 Remedial/Compensatory Mathematics Skills III High School Cr. 1

This course will provide preparatory and remedial mathematics skills assistance to students who have not passed the High School Competency Test, (HSCT). This course will be counted as an elective.

AHS 0393 Algebra II Honors High School Cr. 1

Prerequisite: AHS 0321 with a grade of "C" or better, and satisfactory score on placement test. This course is a dual-enrollment course which also earns three college credit hours in College Algebra. The major topics included in this course are: exponents, roots, and radicals; equations and inequalities; relations and functions; graphs; systems of equations and inequalities; and applications. A review of algebraic techniques is also included in this course as well as geometric and measurement skills.

AHS 0401 American History High School Cr. 1

This course is designed to place emphasis on political, economic and social development of the United States from colonization to the present.

AHS 0402 American Government High School Cr. 1/2

This course includes a study of such topics as the constitution, legislative, executive and judicial branches, and functions of national, state and local government, evolving role of political parties and interest groups in determining government policy, elections and citizenship.

AHS 0404 World History High School Cr. 1

This course examines the political, economic, social, religious, military, dynastic, scientific and cultural events that have affected humanity by covering the chronological development of civilization.

AHS 0405 Economics High School Cr. 1/2

This course provides students the opportunity to acquire an understanding of the way in which society organizes its limited resources to satisfy unlimited wants. Students will be introduced to the major characteristics of the mixed market

economic system. The major emphasis is to provide students with an understanding of the forces of the marketplace by examining the effect on the system of their roles as producer, consumer, saver, investor, resource owner, voter and taxpayer.

AHS 0492 American Government Honors High School Cr. 1/2

Prerequisite: satisfactory score on placement test. This course is a dual-enrollment course which also earns three college credit hours in American Federal Government. The course consists of a study of the theory, organization, principles and functioning of the federal government, emphasizing the relationship of the individual to the government. This course includes reading and writing competencies.

AHS 0495 Economics Honors High School Cr. 1/2

Prerequisite: satisfactory score on placement test. This course is a dual-enrollment course which also earns three college credit hours in Principles of Economics I. It is a course of macroeconomics which presents the foundations of economic analysis, the theory of economic growth, development, and stabilization, current economic issues, and the monetary theory.

AHS 0501 Reading I High School Cr. 1

This is a diagnostic, prescriptive course in reading designed to begin at the students' level in rate and comprehension. Sound-symbol relationships, words in context, structural analysis, sight words, and dictionary pronunciation and meaning are stressed in building vocabulary. Detecting sequence, following directions, and recognizing topics and main ideas are studied in building reading comprehension.

AHS 0502 Reading II High School Cr. 1

Prerequisite: AHS 0501. This is a diagnostic, prescriptive course designed to develop the students' vocabulary and comprehension. Efforts are concentrated on developing reading skills essential for generalized high school materials. Group and individual instruction and a variety of machines and materials are available to achieve a grade level of 10.5 in reading.

AHS 0590 Remedial/Compensatory Reading Skills High School Cr. 1/2

This course will provide preparatory and remedial reading skills assistance to students who have not passed the High School Competency Test (HSCT). This course will be counted as an elective.

AHS 0601 Health I, Life Management Skills High School Cr. 1/2

This course is a study of the human body. It also provides students with the opportunities to develop and enhance critical life management skills necessary to make sound decisions and take positive actions for healthy living.

AHS 0701 Employability Skills High School Cr. 1/2

This course provides those students entering the world of work with the basic knowledge needed to help secure a job, improve personal development and increase the opportunity for job success.

AHS 0702 General Business High School Cr. 1

This course provides students with a basic understanding of general business practices as they relate and have application to their everyday business affairs.

AHS 0703 Bookkeeping High School Cr. 1

This course is designed to provide meaningful business problems to the beginner level, equip students with basic vocabulary skills, provide students with an understanding of business forms and help them develop proper work habits and attitudes.

AHS 0711 Typewriting, Personal High School Cr. 1/2

This course is designed to assist students in acquiring mastery of the keyboard for entry-level job training and for personal use. Basic typing skills and applications include centering, tabulating, personal and business communications, themes, outlines, report manuscripts and inventory measurements.

AHS 0712 Clerk-Typist High School Cr. 1

This is a course designed to give students an understanding of important clerical functions performed in offices and to develop a comprehension of the application of these functions to related office procedures. Units include basic skills for office jobs, processing data, mailing and shipping services, business filing, records management, receptionist duties, and telephone and telegraph services.

AHS 0715 Shorthand, Personal High School Cr. 1/2

This course provides opportunities for learning to write with speed in as short a period of time as possible. It aims primarily to meet the needs of individuals having note taking responsibilities, including reporting and record keeping in community organizations, and other personal use activities.

AHS 0731 Child Development, Guidance and Care High School Cr. 1

This course is a study of the child from prenatal through pre-school age with emphasis on physical, social, emotional and mental development. Cultural and environmental influences on the child will also be incorporated into this course.

AHS 0741 Clothing and Textiles High School Cr. 1/2

This course is planned for individuals who have little or no experience in recently developed techniques in clothing construction and includes a study of pattern selection including body measurements and simple alterations, fabric selection and preparation with emphasis placed on "easy-to-sew" patterns and fabrics. Students will learn about the selection, use and care of modern sewing and pressing equipment. The course culminates in the completion of a simple garment and selection of suitable accessories. In addition the course prepares students to understand the social psychological and physiological aspects of clothing and textiles as well as the effect of consumer choices on the individual and family.

AHS 0745 Fundamentals of Interior Design Services High School Cr. 1

This course includes a study of the ways in which attractive and livable interiors can be planned in relation to individual and family housing situations and incomes, choosing and combining line, color, design and various materials, and wall, window and floor treatments as they relate to other phases of decoration. Practical information concerning choice of furnishings and equipment will be included. This course may include construction of slipcovers, draperies, curtains and bedspreads.

AHS 0761 Drafting, Mechanical High School Cr. 1

This course provides instruction in drafting as a form of graphic communication to express ideas and convey information by means of geometric shapes, lines and dimensions. The content includes but is not limited to the visualization of objects in three dimensions, preparation of working drawings, reading drawings and prints, using drafting tools and materials, and providing substantial practice in drafting techniques.

AHS 0771 Basic Automotive Body Repair and Refinishing IV High School Cr. 1

This course is designed to prepare students for employment as automobile body workers. It covers instructions in the different procedures for measuring and pulling and for preparing surfaces for refinishing.

AHS 0801 Drawing and Painting I High School Cr. 1

This course is a study of the fundamentals of drawing and painting, concepts of drawing principles and composition, and a study of techniques.

AHS 0821 Drama I High School Cr. 1

This course provides an in-depth theatrical experience in planning and executing production functions including scene construction and painting, props, costuming, acting, lighting and other full technical responsibilities.

AHS 0822 Drama II High School Cr. 1

This course provides intermediate development in the study and practice of theatre arts. The content includes instruction in reading and interpretation of dramatic literature. Students will be introduced to techniques and mechanics of acting including scenery construction, costume and lighting design, as well as other features of stagecraft, character analysis and portrayal, interpretive study of plays and production of plays.

AHS 0823 Acting I High School Cr. 1

This course introduces students to the study and practice of acting. The course will include techniques of acting, terminology, movement, vocal production and characterization.

AHS 0824 Stagecraft I High School Cr. 1

This course is an introduction to the tools, terminology, materials and principles of stagecraft. The course requires practical work outside of class on the current productions.

AHS 0825 Voice and Diction I High School Cr. 1

This course provides students an opportunity to improve their speaking voice. This is a basic course targeted at students interested in improving vocal skills developing an effective voice and speech.

AHS 0841 Chorus I High School Cr. 1

This course includes both individual and group singing with emphasis on group vocal experience that may be useful to individuals who participate in community musical activities.

AHS 0911 Advanced Reading High School Cr. 1/2

This is a diagnostic, prescriptive, advanced reading course designed to increase reading speed and further improve reading skills and comprehension.

AHS 0915 Creative Writing High School Cr. 1/2

This course develops students' writing and language skills needed for individual expression in literary forms. The content includes instruction in the development and practice of writing a variety of literary works.

AHS 0940 African-American History High School Cr. 1/2

This course provides students with an understanding of African American heritage within the context of a broad historical focus. Students examine connections to the past to prepare for the future as participating members of a democratic society.

AHS 0941 World Geography High School Cr. 1

World Geography is a general course in geography that includes a study of the physical, economic, political, religious and cultural aspects of important geographic areas and people, and their influence on world conditions and problems.

AHS 0942 Psychology High School Cr. 1/2

This course is designed to provide students with a variety of perspectives for dealing with and understanding human behavior. The emphasis of the course is on application of psychology to life situations encountered by most individuals.

AHS 0943 Sociology High School Cr. 1/2

This course includes the study of cultural influence on our society, the forms, institutions, and the relationships between the sexes, racial and ethnic groups.

AHS 0944 Humanities to 1500 High School Cr. 1/2

The purpose of this course is to examine and respond to creative efforts from early civilization through the 1500s. The content will include, but not be limited to, providing opportunities for students to explore, analyze, synthesize and respond in a variety of ways to cultural traditions. These include viewing, listening, speaking, reading, writing, performing and creating. Students should gain an appreciation for and an understanding of themselves and their world through an interdisciplinary approach involving the study of painting, sculpture, architecture, music, dance, drama, history, literature, philosophy and religion.

AHS 0945 Humanities Since 1500 High School Cr. 1/2

The purpose of this course is to examine and respond to creative efforts from the post-Renaissance through the contemporary period. The content will include, but is not limited, to providing opportunities for students to explore, analyze, synthesize and respond in a variety of ways to cultural traditions. These ways include viewing, listening, speaking, reading, writing, performing and creating. Students should gain an appreciation for and an understanding of themselves and their world through an interdisciplinary approach involving the study of painting, sculpture, architecture, music, dance, drama, history, literature, philosophy and religion.

AHS 0946 Law Studies High School Cr. 1/2

The purpose of this course is to acquaint students with the various phases of law that affect everyday life. Included are topics such as the basis of the legal system, the organization of the legal system, criminal and juvenile justice, consumer law, the civil court and social values and their impact on interpretations of the law and the supremacy.

AHS 0949 Civics High School Cr. 1

This course deals with the structure and function of government at the local, state, and national levels. Course content includes the U.S. Constitution, U.S. government and the free enterprise system.

AHS 0951 French I High School Cr. 1

This course provides students with beginning skills in listening and speaking with emphasis on pronunciation of words in introductory French.

AHS 0952 French II High School Cr. 1

Prerequisite: AHS 0951. This course, a continuation of French I, is adapted to the needs and interests of adults who wish to improve and expand speaking and oral comprehension abilities which were begun in French I.

AHS 0953 Spanish I High School Cr. 1

This course provides students with elements of grammar, with conversation and composition, and reading of Spanish texts.

AHS 0954 Spanish II High School Cr. 1

Prerequisite: AHS 0953. This course, a continuation of Spanish I and is adapted to the needs and interests of students who wish to improve and expand speaking and oral comprehension abilities which were begun in Spanish II.

AHS 0955 German I High School Cr. 1

This course is adapted to the needs and interests of students who wish to acquire a speaking and oral comprehension ability in introductory German.

AHS 0957 Conversational Italian I High School Cr. 1

This course provides conversational abilities in the areas of travel, vocational subjects and self-enrichment to the students who do not desire a formal knowledge of grammar or literature as taught in the regular programs. The emphasis is on oral communication and useful everyday expressions.

**AHS 0961 Health II,
Personal Health**

High School Cr. 1/2

Prerequisite: AHS 0601. This course is a continuation of Health I, Life Management Skills and continues the study of health as it applies to the individual students, their families and the larger community in which they live. The course provides students with knowledge and skills necessary for making sound health decisions.

AHS 0962 Personal Fitness **High School Cr. 1/2**

The purpose of this course is to provide students with opportunities to develop an individual optimal level of physical fitness, acquire knowledge of physical fitness concepts and acquire knowledge of the significance of life style on one's health and fitness. The content should include, but is not limited, to knowledge of psychological values of physical fitness including stress management, knowledge of sound nutritional practices and knowledge of consumer issues related to physical fitness.

**AHS 0963 Personal, Social, and Family
Relationships** **High School Cr. 1/2**

The purpose of this course is to develop advanced knowledge and skills that promote positive social and emotional interactions and relationships. A human development course for students up to age 18. This course provides an opportunity for students to explore the meaning or purpose of life, discover the mystery of the transition from adolescence to adulthood and feel a deep connection to the wholeness of life.

**AHS 0971 Introduction to the
Computer** **High School Cr. 1/2**

The purpose of this course is to provide an overview of computers in today's world including what they are, what they do, how they work, the hardware involved, the necessary components of an information system, the need for accuracy and controls, the most common languages, the most common business applications and an understanding of the basic terminology.

AHS 0972 Computer Applications **High School Cr. 1/2**

The purpose of computer applications is to introduce students to the care and uses of microcomputers and to give them an opportunity for as much hands-on experience as possible. The content includes but is not limited to, simple programming and the use of commercially available software.

**AHS 0973 Word Processing and
Communication Concepts** **High School Cr. 1**

This course is designed to provide instruction that will enable students to perform basic word processing and applications skills on text-editing automated equipment. This course includes the creation and revision of documents, stored text and the use of special features.

**AHS 0975 Community Service:
Volunteerism** **High School Cr. 1/2**

This course provides students with hands on experience in local community service agencies and helps them develop an appreciation of the concept of volunteerism and its

impact on others. Students will identify community needs and volunteer placement options and provide 60 hours of meaningful community service through a local agency. Course content includes a self-assessment, and analysis of the structure of volunteer service programs, and an oral or written presentation about the experience of being a volunteer.

ASE 0010 Adult Studies Prep A

This course provides instruction in the elementary skills of reading, writing, arithmetic, spelling, social studies, health and science for adults who desire a foundation of study at the secondary level.

ASE 0011 Adult Studies Prep B

This course provides instruction in the elementary skills of reading, writing, arithmetic, spelling, social studies, health and science for adults who desire a foundation of study at the secondary level.

ASE 0012 Adult Life Stages

This course is designed to teach basic skills while exploring the psychological and physiological changes which take place during the various stages of an adult's life. The content of the course includes implications of aging, adult socialization opportunities, health issues, security issues and social services for adults.

ASE 0020 Adult Studies Preparation Lab A

This course is designed to provide basic and life skills instruction for adults in a computer aided instruction environment. Instruction includes reading, mathematics, writing, critical thinking and problem solving. A variety of technology and innovative instructional techniques will be used to teach reading, math, writing, critical thinking and problem solving.

ASE 0021 Adult Studies Preparation Lab B

This course is designed to provide basic and life skills instruction for adults in a computer aided instruction environment. Instruction includes reading, mathematics, writing, critical thinking and problem solving. A variety of technology and innovative instructional techniques will be used to teach reading, math, writing, critical thinking and problem solving.

ASE 0050 Adult Studies Functional Skills 1A

This course is designed to provide instruction in basic skills and life skills for adults. The content of the course includes reading, writing and mathematics concepts as they apply to a particular functional task.

ASE 0051 Adult Studies Functional Skills 1B

This course is designed to provide instruction in basic skills and life skills for adults. The content of the course includes reading, writing, and mathematics concepts as they apply to a particular functional task.

ASE 0060 Adult Studies Review

The General Education Development (GED) tests are designed to provide an opportunity to earn a high school equivalency diploma. Academic areas include writing skills (which include composing an essay), social studies, science, interpreting literature and the arts, and mathematics.

ASE 0061 Adult Studies Review Lab

This course is designed for students enrolled in Adult Studies Review and other non-high school graduates. Students will receive computer assisted instruction along with other current critical thinking and problem solving skills in a lab setting.

ASE 0070 Adult Studies Unit Review

This course will provide remedial assistance to students who have taken the General Education Development (GED) test and did not pass one or more of the five GED subject areas tests. Emphasis will be placed on remediating skills students failed on the GED test.

ASE 0071 Adult Studies Unit Review Lab

This course is designed for students enrolled in Adult Studies Unit Review and other non-high school graduate students. Students will receive computer assisted instructions along with other current critical thinking and problem solving skills needed to pass the General Education Development tests in a lab setting.

ASE 0080 Adult Studies Test Techniques

This course provides critical, to the point information about the high school equivalency examination. The goal is to familiarize students with the general format of the test and with the types of questions that will be asked. During the seminar, students will be given the GED test philosophy, statistics regarding the exam, guidelines for successful test taking in general and an opportunity to discuss any questions they may have about the examination. The course includes a test structured similarly to the GED test.

ASE 0090 Adult Studies General Education

This course includes instruction in general education subjects, including elementary and secondary levels. This offering is designed to accommodate the needs of a class which consists in part of individuals who are on the high school level.

SLD 0100 English for Speakers of Other Languages

This series of courses provides English instruction to speakers of other languages. The primary goal is the acquisition of communication skills to enable students to function successfully within our society. There are six skill levels offered and each incorporates all four skill areas — listening, speaking, reading and writing. For more information call 633-8484.

Recreation Courses**(Self-Supporting Courses)**

Florida Community College at Jacksonville offers recreational courses on request from the community. These courses are supported by fees (self-supporting) and not funded by the state. The fee structure for these courses is calculated to cover the direct instructional cost of offering the course to the community. For more information call Open Campus at 633-8292.

